

AGRICULTURAL STATISTICS, IRELAND.

GENERAL ABSTRACTS

SHOWING

THE ACREAGE UNDER THE SEVERAL CROPS,

AND THE

NUMBER OF LIVE STOCK

IN

EACH COUNTY AND PROVINCE,

FOR THE YEAR

1873.

ALSO, THE EMIGRATION FROM IRISH PORTS FROM 1st JANUARY
TO 31st JULY, IN 1872 AND 1873,

AND THE NUMBER OF SCUTCHING MILLS IN EACH PROVINCE IN 1872.

Presented to both Houses of Parliament by Command of Her Majesty.



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1873,

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AGRICULTURAL STATISTICS, IRELAND, 1873.

TO HIS EXCELLENCY JOHN POYNTZ, EARL SPENCER, K.G.,

&c., &c., &c.,

LORD LIEUTENANT-GENERAL AND GENERAL GOVERNOR OF IRELAND.

MAY IT PLEASE YOUR EXCELLENCY,

I had the honour of submitting, on the 7th ultimo, a Return by Counties of the acreage under Flax in 1872 and 1873, with the number of Scutching Mills in 1872, and on the 11th ultimo, an Abstract of the number and value of Horses, Cattle, Sheep, and Pigs, by Provinces and for all Ireland, in 1872 and 1873, with the Increase or Decrease in the latter year. I now beg to submit the annual General Abstracts, which give, as usual, by Counties and Provinces, the total area under each description of Crop; also the total number of Horses, Cattle, Sheep, and Pigs, and their estimated value.

The Emigration from Ireland, during the first seven months of the same years, is also given.

The collection of the Agricultural Statistics, which commenced on the 2nd of June, occupied about two months. The Enumerators, of whom nearly 3,800 were employed, were selected from the Royal Irish Constabulary and Metropolitan Police, and discharged this duty with their usual efficiency. The various holdings, which amount in all to about 600,000, were visited by them, and the names of the several parties from whom the particulars of Tillage and Live Stock for each holding were obtained, are stated in the Returns, with a view to further inquiry in any case, should it be deemed necessary.

Your Excellency is aware that the information given to the Enumerators is altogether voluntary; and I feel assured it will afford pleasure to your Excellency to learn, as, I beg to say, it is most gratifying to have it in my power to state, that so far as I am informed by the Officers who acted as Superintendents of Districts, the Returns have been collected without difficulty—a fact most highly creditable to the good feeling and intelligence of all ranks and classes connected with land in this country.

The Abstracts have been carefully compiled from summaries made by the Enumerators for their respective districts. They may possibly differ in some degree from the revised figures which will

Success of
the Enume-
ration.

be hereafter published; but I do not anticipate that any change of importance will become necessary.

Extent under Crops.	The total acreage under all Crops this year was	5,270,159 acres.
	The do. do. do. in 1872 (<i>revised numbers</i>)	5,487,313 "
	Showing a decrease in the extent under Crops in 1873 of :	217,154 "

The Crops which *increased* in extent this year are—

Increase in Cereals, Green Crops, and Flax.

		Increase.	
		Acres.	Acres.
CEREALS,	{ Barley,	11,175 }	12,226
	{ Beans and Pease,	1,051 }	
GREEN CROPS,	{ Turnips,	1,193 }	4,961
	{ Mangel and Beet Root,	3,350 }	
	{ Carrots, Parsnips, and other		
	{ Green Crops,	418 }	
	Flax,		7,440
	Meadow and Clover,		37,210
Total Increase on the foregoing Crops,			61,837

The Crops which *decreased* in acreage in 1873 are—

Decrease in Cereals and Green Crops.

		Decrease.	
		Acres.	Acres.
CEREALS,	{ Wheat,	56,859 }	172,216
	{ Oats,	114,622 }	
	{ Bere and Rye,	735 }	
GREEN CROPS,	{ Potatoes,	88,589 }	106,775
	{ Cabbage,	11,389 }	
	{ Vetches and Rape,	6,797 }	
Total Decrease on the foregoing Crops,			278,991
Making a Net Decrease in the area under all Crops of			217,154

Crops of 1873 compared with Crops of 1872.

It appears from the foregoing summaries that, compared with 1872, wheat shows a decrease of 56,859 acres, oats of 114,622 acres, bere and rye of 735 acres, potatoes of 88,589 acres, cabbage of 11,389 acres, and vetches and rape of 6,797 acres. In barley there is an increase of 11,175 acres, in beans and pease of 1,051 acres, in turnips 1,193 acres, mangel and beet root 3,350 acres, carrots, parsnips, and other green crops, 418 acres, flax 7,440 acres, and meadow and clover 37,210 acres.

ABSTRACT OF CEREAL CROPS.

	1872.	1873.	Increase in 1873.	Decrease in 1873.
	Acres.	Acres.	Acres.	Acres.
WHEAT,	223,294	168,435	—	56,859
OATS,	1,624,711	1,510,089	—	114,622
BARLEY,	219,013	230,188	11,175	—
BERE AND RYE,	9,975	9,240	—	735
BEANS AND PEASE,	11,821	12,872	1,051	—
TOTAL,	2,090,814	1,930,824	—	159,990

Decrease in Cereal Crops in 1873, 159,990 Acres.

ABSTRACT OF GREEN CROPS.

	1872.	1873.	Increase in 1873.	Decrease in 1873.
	Acres.	Acres.	Acres.	Acres.
POTATOES,	991,871	903,232	—	88,639
TURRIPS,	340,711	347,904	1,193	—
MANGEL WURZEL AND BEET ROOT,	34,832	38,182	3,350	—
CABBAGE,	39,432	28,063	—	11,369
CARROTS, PARSNIPS, AND OTHER GREEN CROPS,	31,196	31,614	418	—
VETCHES AND RAPE,	30,172	23,375	—	6,797
TOTAL,	1,474,234	1,372,420	—	101,814

Decrease in Green Crops in 1873, . . . 101,814 Acres.

GENERAL SUMMARY OF CEREAL AND GREEN CROPS, &c.

		Acres.	Acres.
Decrease in Cereal Crops	in 1873,	159,090	261,804
Do. Green Crops	in do.	101,814	
Increase in Flax	in do.	7,440	44,650
Do. Meadow and Clover	in do.	37,210	
Total Decrease in the extent of Land under Crops in 1873,			217,154

The extent under Crops, Grass, Fallow, Woods and Plantations, and Bog and Waste *unoccupied*, in 1872 and 1873, is given by Provinces in the following Table:—

Divisi
of Land.

PROVINCES.	Extent under Crops.	Grass.	Fallow.	Woods and Plan- tations.	Bog and Waste <i>Unoccupied.</i>	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
LEINSTER, { 1872, 1,553,863	2,545,842	6,395	101,546	630,275	4,837,921	
{ 1873, 1,471,519	2,638,547	5,715	101,243	630,897		
MUNSTER, { 1872, 1,319,660	3,351,837	6,899	112,148	1,144,236	5,934,789	
{ 1873, 1,266,833	3,402,220	3,856	109,851	1,151,979		
ULSTER, { 1872, 1,874,084	2,233,341	4,063	60,951	1,147,348	5,319,787	
{ 1873, 1,810,737	2,254,902	3,133	61,726	1,189,289		
CONNAUGHT, { 1872, 739,697	2,115,095	1,047	51,058	1,326,299	4,233,196	
{ 1873, 721,020	2,125,026	770	50,963	1,335,417		
TOTAL, { 1872, 5,487,313	10,246,115	18,404	325,703	4,248,158	20,325,693*	
{ 1873, 5,270,159	10,420,695	13,474	323,783	4,297,582		

* Exclusive of the larger Rivers, Lakes, and Tideways.

The acreage under the head of "*Bog and Waste unoccupied*," had not any Live Stock on it at the period of the enumeration.

The area under the several Crops in each year from 1869 to 1873, inclusive, was as under:—

Crops.	1869.	1870.	1871.	1872.	1873.
	Acres.	Acres.	Acres.	Acres.	Acres.
Wheat,	280,480	250,846	244,451	225,284	168,435
Oats,	1,685,240	1,650,039	1,636,136	1,624,711	1,510,369
Barley,	221,710	241,285	220,979	219,013	230,138
Bere and Rye,	11,183	11,797	11,555	9,975	9,340
Beans and Pease,	9,955	10,689	10,913	11,821	12,872
Potatoes,	1,041,902	1,043,583	1,058,434	991,871	903,292
Turnips,	322,072	339,059	327,035	346,711	347,904
Mangel and Beet Root,	21,129	25,400	31,921	34,832	38,182
Cabbage,	32,263	34,979	33,008	30,452	28,063
Carrots, Parsnips, and } other Green Crops, }	26,501	27,712	29,869	31,106	31,814
Vetches and Rape,	25,395	27,990	31,422	30,172	23,375
Flax,	229,252	194,010	156,070	121,992	129,432
Meadow and Clover,	1,670,716	1,773,851	1,829,044	1,800,273	1,837,483

Live Stock.

RETURNS OF LIVE STOCK.

It appears from the following Table that the Returns of Live Stock for 1873 when compared with 1872 show a *decrease* in the number of Horses of 8,828;—an *increase* in Cattle of 83,003;—and in Sheep of 218,799; and a *decrease* of Pigs amounting to 346,327.

Number of
Live Stock.

The following are the numbers of Live Stock for each year from 1863 to 1873, inclusive:—

Years.	Number of Horses.	Number of Cattle.	Number of Sheep.	Number of Pigs.
1863,	579,978	3,144,231	3,306,204	1,007,458
1864,	562,138	3,202,294	3,366,941	1,058,489
1865,	548,339	3,497,548	3,694,350	1,305,953
1866,	535,799	3,746,157	4,274,282	1,497,274
1867,	524,180	3,707,803	4,835,519	1,235,191
1868,	524,703	3,646,796	4,901,496	869,578
1869,	528,201	3,733,675	4,651,195	1,682,224
1870,	532,657	3,799,912	4,336,884	1,461,215
1871,	538,095	3,976,372	4,233,435	1,621,423
1872,	540,974	4,059,397	4,263,254	1,868,571
1873,	532,146	4,142,400	4,482,053	1,042,244
<i>Difference in Numbers between 1872 and 1873,</i>	<i>Decrease.</i> 8,828	<i>Increase.</i> 83,003	<i>Increase.</i> 218,799	<i>Decrease.</i> 346,327

Value of
Live Stock.

The *total estimated value* of Horses, Cattle, Sheep, and Pigs this year, is £37,415,851, being an *increase* of £276,665 when compared with 1872, as appears by the following Table:—

ESTIMATED VALUE OF LIVE STOCK in IRELAND in each Year from 1863 to 1873, inclusive, calculated according to the rates assumed by the Census Commissioners of 1841, viz. :—For Horses, £8 each ; Cattle, £6 10s. ; Sheep, 22s. ; and Pigs, 25s. each. [These rates have been retained since 1841, in order to facilitate a comparison of the value—one year with another. A per-centage may be added by anyone at pleasure on account of the increased value of live stock since that period.]

Years.	Horses.	Cattle.	Sheep.	Pigs.	Total Value.
	£	£	£	£	£
1863, . . .	4,639,824	20,437,501	3,639,024	1,334,322	30,050,671
1864, . . .	4,497,264	21,204,911	3,703,635	1,323,100	30,728,910
1865, . . .	4,386,712	22,734,062	4,063,792	1,632,441	32,817,007
1866, . . .	4,286,392	24,350,020	4,701,710	1,871,593	35,209,715
1867, . . .	4,193,440	24,100,719	5,319,071	1,543,989	35,157,219
1868, . . .	4,197,624	23,704,174	5,391,646	1,086,972	34,380,416
1869, . . .	4,225,608	24,269,898	5,116,314	1,352,780	34,963,590
1870, . . .	4,261,256	24,699,428	4,770,572	1,826,519	35,557,775
1871, . . .	4,304,760	25,846,418	4,656,779	2,026,779	36,834,736
1872, . . .	4,327,792	26,396,081	4,689,579	1,785,714	37,199,166
1873, . . .	4,257,168	26,925,600	4,930,258	1,802,805	37,915,831
Difference in Value between 1872 and 1873,	Decrease, £70,624	Increase, £539,519	Increase, £240,679	Decrease, £432,909	Increase, £276,665

Scutching Mills.—The number of Mills for scutching Flax in each province in 1872, was—In Ulster, 1,375;—Leinster, 36;—Munster, 39;—Connaught, 32;—making in all 1,482.

Emigration.—In the first seven months of 1872 the Returns of Emigrants from the several ports of Ireland show that 54,995 persons left this country. The number for the same period in 1873 was 66,521, being an increase of 11,526 persons during this year. The emigration referred to is given by months for 1872 and 1873 at page 22.

Labourers' Dwellings.—It is scarcely possible, both on social and sanitary grounds, to exaggerate the importance of improving the dwellings of the labouring classes; the Legislature has enabled the Treasury to grant loans for this most desirable object through the medium of the Board of Public Works, Dublin. According to the Census of 1871, the number of *fourth-class houses* in Ireland, most of which had only *one room for the entire family of EVERY AGE AND SEX*, was ascertained to be very considerable, but has not yet been finally revised, and in these were living nearly *half a million* of persons.

Weeds.—Although great improvement in the breeds and value of every description of Farm Stock has taken place in Ireland since 1841,—when the collection of these Statistics commenced,—it must be admitted that a corresponding improvement has not taken place in the cultivation of the land. At the present moment this is but too apparent on farms generally. On several occasions I felt it my duty to call attention to the incalculable injury arising

Scutching Mills.

Emigration.

Labourers' Dwellings.

Weeds.

from the unchecked growth of weeds which is, unhappily, permitted in almost every part of the country, and also on the sides of roads, railways, and canals. On this subject I have now given, as I did last year, in the Appendix extracts from the General Abstracts of Tillage and Live Stock published in 1856 and 1857, containing valuable information from the writings of Sir John Sinclair and other eminent persons, which I trust will prove useful to those engaged in the cultivation of land. I have also given, at pages 45 to 47, some extracts respecting the great injury and pecuniary loss caused by weeds in Ireland from that valuable publication, the "Leisure Hour," in its number for May and June of this year. At the annual meeting in 1872 of the Royal Agricultural Society in Belfast, the noble President, Lord Lurgan, K.P., referred to "the necessity of acting on the suggestions thrown out in the Reports of the Registrar-General in relation to the extirpation of weeds. They did a deal of mischief, and he thought they should carry out the sentence which the old Scotch law pronounced, declaring anyone to be a TRAITOR WHO POISONED THE QUEEN'S LAND WITH WEEDS."

I again beg to repeat my respectful acknowledgments to the landed proprietors, tenant farmers, the clergy of all denominations, and to the public press in Ireland, for a continuance of the same generous and valuable assistance which I have now for more than twenty years experienced in connexion with these Statistics.

I have the honour to be

Your Excellency's very faithful servant,

WILLIAM DONNELLY,

Registrar-General.

*General Register Office,
Charlemont House, Dublin,
24th September, 1873.*

GREAT BRITAIN.

I beg to give the following Summary, which I have received from the Statistical and Commercial Department of the Board of Trade, showing the extent of land under some of the principal crops, also the number of cattle, sheep, and pigs in Great Britain in 1873, and their increase or decrease in the present year, as compared with 1871 and 1872:—

Years.	Extent of Land in Great Britain under				
	Wheat.	Barley.	Oats.	Potatoes.	Hops.
	Acrea.	Acrea.	Acrea.	Acrea.	Acrea.
1871 . .	3,571,894	2,385,783	2,715,707	627,691	60,030
1872 . .	3,598,957	2,316,332	2,705,837	564,088	61,927
1873 . .	3,490,302	2,336,020	2,676,234	514,693	63,283
Years.	Increase (+) or Decrease (—).				
1873 over 1872	—108,565 or 3·0 per cent.	+19,688 or 0·0 per cent.	—29,603 or 1·1 per cent.	—40,395 or 8·8 per cent.	+1,356 or 2·2 per cent.
1873 over 1871	—81,502 or 2·3 per cent.	—49,763 or 2·1 per cent.	—39,473 or 1·5 per cent.	—112,998 or 18·0 per cent.	+3,253 or 5·4 per cent.
Years.	Total Number of Live Stock in Great Britain upon 25th June.				
	Cattle.	Sheep.	Pigs.		
	Number.	Number.	Number.		
1871, . .	5,337,759	27,119,569	2,499,602		
1872, . .	5,624,994	27,921,507	2,771,749		
1873, . .	5,964,549	29,427,635	2,500,289		
Years.	Increase (+) or Decrease (—).				
1873 over 1872	+339,555 or 6·0 per cent.	+1,506,128 or 5·4 per cent.	—271,490 or 9·9 per cent.		
1873 over 1871	+626,790 or 11·7 per cent.	+2,308,066 or 8·3 per cent.	+657 — —		

GENERAL ABSTRACTS, for each County and Province, showing in

Number.	PROVINCES AND COUNTIES, WITH THEIR AREAS (including water) IN STATUTE ACRES.	EXTENT OF LAND UNDER						
		Wheat.	Oats.	Barley.	Bere and Rye.	Beans and Peas.	Potatoes.	Turnips.
	LEINSTER:	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1	Carlow, . . . { 1872, 221,342 acres, { 1873,	2,967 2,381	23,986 21,429	4,890 5,525	11 8	1 .	11,323 9,983	5,157 5,576
2	Dublin, . . . { 1872, 226,414 acres, { 1873,	7,989 6,408	17,468 16,258	2,754 2,333	208 157	112 95	10,455 10,097	2,607 2,656
3	Kildare, . . . { 1872, 418,436 acres, { 1873,	3,161 2,070	30,909 26,362	15,787 16,002	331 261	37 33	10,488 9,860	13,658 12,951
4	Kilkenny, . . { 1872, 509,732 acres, { 1873,	16,875 9,324	42,303 40,113	13,552 16,085	87 24	11 8	22,516 19,128	11,154 11,049
5	King's, . . . { 1872, 493,985 acres, { 1873,	2,918 1,396	27,811 24,034	14,351 16,019	590 391	7 6	17,910 16,770	11,446 10,776
6	Longford, . . { 1872, 269,409 acres, { 1873,	780 822	22,799 20,892	50 63	193 240	32 14	15,323 13,823	3,254 3,182
7	Louth, . . . { 1872, 201,722 acres, { 1873,	2,828 2,006	26,936 23,073	24,656 23,550	29 40	347 359	13,221 12,718	9,739 9,808
8	Meath, . . . { 1872, 580,083 acres, { 1873,	4,044 2,576	42,906 37,906	2,056 2,035	143 145	227 164	15,132 14,220	8,685 8,062
9	Queen's, . . . { 1872, 428,854 acres, { 1873,	1,552 1,109	23,881 21,352	27,236 26,685	91 42	20 12	18,648 17,194	14,144 13,875
10	Westmeath, . { 1872, 453,468 acres, { 1873,	539 333	31,181 27,978	472 362	192 127	28 11	13,840 12,848	6,808 6,696
11	Wexford, . . . { 1872, 576,588 acres, { 1873,	10,639 8,810	57,335 50,176	50,510 50,560	85 23	4,445 4,994	27,584 23,892	18,981 19,566
12	Wicklow, . . . { 1872, 500,178 acres, { 1873,	4,755 4,556	29,605 26,260	1,226 1,172	12 10	9 5	13,193 12,126	5,882 5,360
	Total of LEINSTER, { 1872, 4,876,211 acres, { 1873,	59,047 41,811	377,120 337,833	157,540 160,371	1,972 1,468	5,276 5,701	189,633 172,638	111,315 110,178
	Increase or Decrease in { LEINSTER in 1873, {	De- crease, 17,236	De- crease, 39,287	In- crease, 2,831	De- crease, 504	In- crease, 425	De- crease, 16,995	De- crease, 1,137

Statute Acres, the extent of Land under Crops in 1872 and 1873.

CROPS, IN STATUTE ACRES.							Fallow or Uncropped Arable Land.	Years.	Population in 1871.	Number.
Mangel Wurzel and Beet Root.	Cabbage.	Carrots, Parsnips, and other Green Crops.	Vetches and Rape.	Flax.	Meadow and Clover.	Total Extent under Crops.				
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	LEINSTER :		
749 917	931 672	611 688	65 40	3 6	31,618 32,191	82,312 79,410	129 137	1872 1873	}	51,472
687 711	878 875	2,112 2,407	252 170	1 .	48,127 45,525	93,650 87,892	221 309	1872 1873		}
1,318 1,282	240 181	700 551	594 410	1 1	54,311 52,374	131,315 122,337	439 540	1872 1873	}	
1,499 1,641	1,911 1,407	713 704	580 356	19 5	59,945 61,203	171,165 161,047	2,451 2,015	1872 1873		}
1,878 1,845	593 298	1,105 944	1,126 828	187 30	48,883 46,934	128,805 120,271	145 257	1872 1873	}	
302 376	1,016 705	265 301	178 143	463 545	32,231 35,324	76,886 78,436	79 111	1872 1873		}
403 380	199 181	604 655	894 608	779 1,012	21,877 21,480	102,632 97,865	121 116	1872 1873	}	
997 1,112	402 254	1,544 1,419	868 582	275 230	77,919 73,559	155,198 142,254	1,385 910	1872 1873		}
2,194 2,163	763 495	586 649	311 196	89 1	57,925 58,278	147,440 142,031	180 132	1872 1873	}	
958 1,074	765 488	809 874	814 780	87 54	51,612 51,916	108,085 108,541	273 258	1872 1873		}
3,532 3,541	1,570 1,153	1,041 1,484	545 282	140 20	62,301 61,528	238,708 226,029	806 554	1872 1873	}	
754 918	686 457	778 691	198 165	. .	60,589 60,270	117,667 112,580	184 376	1872 1873		}
15,271 15,980	9,934 7,166	10,868 11,367	6,425 4,540	2,024 1,904	607,438 600,582	1,553,863 1,471,519	6,395 5,715	1872 1873	}	
In-crease, 689	De-crease, 2,768	In-crease, 499	De-crease, 1,885	De-crease, 120	De-crease, 6,806	De-crease, 82,344	De-crease, 690	Increase or Decrease in LEINSTER in 1873.		

[continued on page 12.]

GENERAL ABSTRACTS, for each County and Province, showing in Statute

Number.	PROVINCE AND COUNTIES, WITH THEIR AREAS (including water) IN STATUTE ACRES.	EXTENT OF LAND UNDER						
		Wheat.	Oats.	Barley.	Bere and Rye.	Beans and Pease.	Potatoes.	Turkies.
	MUNSTER:	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1	Clare, . . . { 1872, 827,994 acres, { 1873,	7,939 6,886	17,379 16,671	2,265 2,645	726 850	460 239	30,936 28,650	6,966 6,849
2	Cork, E.R., { 1872, 1,040,284 acres, { 1873,	16,724 13,100	67,132 86,545	16,020 18,604	67 102	13 18	48,475 30,315	29,799 29,147
3	Cork, W.R., { 1872, 809,399 acres, { 1873,	7,228 6,101	32,523 29,837	6,215 6,697	72 39	4 6	34,506 29,015	11,495 11,361
4	Kerry, . . . { 1872, 1,185,917 acres, { 1873,	1,751 1,568	27,831 25,130	4,332 4,702	778 795	14 9	33,326 28,631	5,775 6,078
5	Limerick, . . { 1872, 681,112 acres, { 1873,	14,480 11,293	24,537 24,323	3,931 4,406	115 77	15 10	30,771 25,936	5,638 6,978
6	Tipperary, N.R., { 1872, 524,920 acres, { 1873,	6,223 4,261	29,860 25,970	7,483 9,781	128 168	6 2	20,852 18,530	13,407 12,941
7	Tipperary, S.R., { 1872, 536,811 acres, { 1873,	12,335 8,779	30,398 36,511	833 1,533	43 27	1 9	24,005 20,468	8,795 9,249
8	Waterford, . . { 1872, 481,553 acres, { 1873,	15,463 12,080	26,780 28,760	1,911 2,133	93 122	8 30	18,571 15,064	8,229 8,314
	Total of MUNSTER, { 1872, 6,067,990 acres, { 1873,	82,045 64,108	297,440 273,267	42,990 50,501	2,022 2,170	537 323	241,432 205,009	90,074 90,907
	Increase or Decrease in MUNSTER in 1873, {	De- crease, 17,937	De- crease, 24,173	In- crease, 7,511	In- crease, 148	De- crease, 204	De- crease, 35,823	In- crease, 833
	CONNAUGHT:							
1	Galway, . . . { 1872, 1,566,354 acres, { 1873,	11,985 10,473	60,257 57,656	5,019 4,828	1,445 1,271	99 105	55,806 54,170	17,739 17,217
2	Leitrim, . . . { 1872, 392,363 acres, { 1873,	129 207	15,988 14,958	22 9	154 203	3 5	21,571 20,833	770 955
3	Mayo, . . . { 1872, 1,363,882 acres, { 1873,	3,889 3,203	74,247 68,036	2,822 3,223	1,712 1,642	91 86	64,661 61,316	13,688 13,394
4	Roscommon, . { 1872, 607,691 acres, { 1873,	918 551	39,077 35,651	61 128	294 461	2 1	34,937 31,548	5,583 5,550
5	Sligo, . . . { 1872, 461,753 acres, { 1873,	743 888	33,128 30,223	1,840 1,916	121 98	4 3	26,827 25,197	4,165 4,131
	Total of CONNAUGHT, { 1872, 4,392,643 acres, { 1873,	17,668 15,322	232,697 206,522	9,764 10,104	3,726 3,675	199 200	204,802 193,064	41,949 41,187
	Increase or Decrease in CONNAUGHT in 1873, {	De- crease, 2,346	De- crease, 16,175	In- crease, 340	De- crease, 51	In- crease, 1	De- crease, 11,738	De- crease, 752

Acres, the extent of Land under Crops in 1872 and 1873—continued.

CROPS, IN STATUTE ACRES.

Mangel Wurzel and Beet Root.	Cabbage.	Carrots, Parsnips, and other Green Crops.	Vetches and Rape.	Flax.	Meadow and Clover.	Total Extent under Crops.	Fallow or Un- cropped Arable Land.	Years.	Population in 1871.	Number.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		MUNSTER:	
1,061	1,769	619	68	335	74,566	145,085	35	1872	147,994	1
1,213	1,517	516	52	252	79,034	145,324	8	1873		
4,206	1,865	1,729	3,372	492	102,047	321,743	1,348	1872	339,766	2
4,418	1,253	1,920	2,786	362	104,032	301,692	574	1873		
1,194	1,570	1,586	2,093	884	39,720	139,092	3,840	1872	176,280	3
1,277	1,098	981	1,838	630	43,316	131,706	868	1873		
1,385	2,670	457	223	382	77,634	156,758	25	1872	196,014	4
1,486	2,408	469	263	295	80,314	152,646	89	1873		
1,364	1,410	759	323	61	95,888	178,801	300	1872	191,313	5
1,499	1,256	791	172	41	100,108	176,888	935	1873		
1,780	1,456	518	666	130	56,022	138,531	189	1872	92,896	6
1,891	1,173	580	475	12	55,905	131,679	250	1873		
1,148	1,692	682	218	11	52,681	141,712	741	1872	123,324	7
1,365	1,370	690	180	3	55,417	135,601	667	1873		
1,523	1,341	849	169	3	21,005	97,947	331	1872	122,825	8
1,690	1,093	982	112	3	21,564	91,947	465	1873		
13,633	13,792	7,199	7,134	2,298	519,063	1,319,669	6,899	1872	1,390,402.	Total of MUNSTER.
14,839	11,166	6,929	5,878	1,598	539,588	1,266,883	3,856	1873		
In- crease, 1,176	De- crease, 2,616	De- crease, 270	De- crease, 1,256	De- crease, 700	In- crease, 20,525	De- crease, 52,786	De- crease, 3,043	Increase or Decrease in MUNSTER in 1873.		
1,277	1,358	1,106	4,745	128	62,296	224,254	343	1872	248,257	1
1,492	1,069	1,301	4,160	103	67,406	221,253	312	1873		
206	1,788	246	110	530	42,484	84,001	327	1872	95,324	2
238	1,363	298	76	461	43,655	83,279	22	1873		
162	2,240	703	1,071	1,391	34,227	200,908	106	1872	245,855	3
254	1,824	871	877	1,133	33,845	189,444	252	1873		
336	948	382	1,556	206	51,294	135,594	124	1872	141,248	4
398	693	450	1,284	274	57,454	134,443	93	1873		
91	1,437	303	304	642	25,333	94,940	147	1872	115,311	5
124	1,162	304	177	505	27,933	92,601	91	1873		
2,072	7,780	2,734	7,786	2,897	215,634	739,697	1,047	1872	845,993	Total of CONNAUGHT.
2,526	5,851	3,224	6,574	2,476	230,295	721,030	770	1873		
In- crease, 454	De- crease, 1,929	In- crease, 490	De- crease, 1,212	De- crease, 421	In- crease, 14,661	De- crease, 18,677	De- crease, 277	Increase or Decrease in CONNAUGHT in 1873.		

[continued on page 14.]

GENERAL ABSTRACTS, for each County and Province, showing in Statute

Number.	PROVINCES AND COUNTIES, WITH THEIR AREAS (including water) IN STATUTE ACRES.	EXTENT OF LAND UNDER						
		Wheat.	Oats.	Barley.	Bere and Rye.	Beans and Pease.	Potatoes.	Timps.
	ULSTER:	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1	Antrim, . . . { 1872, 761,803 acres, { 1873,	8,672 5,788	86,561 81,626	1,018 987	83 41	3,293 3,363	51,186 48,811	11,037 10,690
2	Armagh, . . . { 1872, 328,076 acres, { 1873,	10,599 6,660	68,487 64,425	310 336	69 49	254 374	32,799 30,108	7,996 8,626
3	Cavan, . . . { 1872, 477,360 acres, { 1873,	407 481	55,200 49,827	7 19	32 51	24 8	32,079 29,045	3,085 3,431
4	Donegal, . . . { 1872, 1,193,443 acres, { 1873,	2,086 1,502	98,198 96,330	2,753 2,703	620 564	511 488	50,807 48,318	17,418 17,133
5	Down, . . . { 1872, 612,495 acres, { 1873,	34,024 24,793	122,336 118,859	1,031 1,132	308 129	1,031 1,310	59,627 53,259	19,362 21,113
6	Fermanagh, . . { 1872, 457,287 acres, { 1873,	633 751	27,496 25,374	50 27	131 160	38 44	18,517 17,084	3,597 3,359
7	Londonderry, . { 1872, 522,350 acres, { 1873,	3,587 2,691	81,516 78,287	1,212 1,395	735 680	565 840	30,792 35,370	14,641 15,662
8	Monaghan, . . { 1872, 319,757 acres, { 1873,	2,233 1,705	64,466 61,848	2,223 2,552	148 140	61 104	25,810 24,290	8,713 8,839
9	Tyrone, . . . { 1872, 806,296 acres, { 1873,	4,265 2,953	123,194 116,391	107 61	129 113	102 117	48,387 45,686	17,691 17,359
	Total of Ulster, { 1872, 5,478,967 acres, { 1873,	68,536 47,194	727,454 692,467	9,719 9,212	2,235 1,927	5,819 6,648	356,004 331,971	103,382 105,632
	Increase or Decrease in Ulster in 1873, . {	De- crease, 19,342	De- crease, 34,987	In- crease, 493	De- crease, 328	In- crease, 829	De- crease, 24,033	In- crease, 2,250
	Total of IRELAND, { 1872, 20,815,111 acres, { 1873,	225,294 168,435	1,624,711 1,510,089	219,013 230,188	9,975 9,240	11,821 12,872	991,871 903,282	346,711 347,004
	Increase or Decrease in IRELAND in 1873, . {	De- crease, 56,859	De- crease, 114,622	In- crease, 11,175	De- crease, 735	In- crease, 1,051	De- crease, 88,589	In- crease, 1,193

Acres, the extent of Land under Crops in 1872 and 1873—continued.

CROPS, IN STATUTE ACRES.							Fallow or Un-cropped Arable Land.	Years.	Population in 1871.	Number.
Mangel Wurzels and Beet Root.	Cabbages.	Carrots, Parsnips, and other Green Crops.	Vetches and Rape.	Flax.	Meadow and Clover.	Total Extent under Crops.				
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.		ULSTER:	
399 558	452 140	1,168 1,267	1,285 1,118	10,065 11,752	80,067 79,105	255,228 245,326	1,241 680	1872 1873	}	403,630
197 301	247 116	1,271 1,589	1,625 963	7,530 9,694	41,164 41,777	172,550 164,818	372 246	1872 1873		
355 456	1,587 970	621 727	260 194	6,098 7,229	55,314 58,801	155,069 151,239	405 65	1872 1873	}	140,555
344 480	1,784 1,002	910 933	938 919	16,648 14,495	48,239 47,933	241,208 232,800	563 818	1872 1873		
698 1,021	496 269	2,117 1,772	2,791 1,444	20,451 27,124	68,810 67,535	332,922 319,260	192 312	1872 1873	}	293,927
587 721	704 401	717 655	102 151	3,896 3,443	49,631 51,360	106,105 103,530	480 174	1872 1873		
313 415	758 318	1,100 815	761 784	19,113 18,900	35,277 36,709	196,400 192,236	450 587	1872 1873	}	173,932
470 537	647 283	749 773	429 445	11,604 11,557	29,705 31,301	147,278 144,394	87 73	1872 1873		
413 398	1,291 381	1,742 1,563	636 465	19,368 19,260	49,931 52,497	267,266 257,234	273 178	1872 1873	}	215,668
3,826 4,857	7,956 3,680	10,395 10,094	9,827 6,383	114,773 123,454	458,138 467,016	1,874,084 1,810,737	4,063 3,133	1872 1873		
In-crease, 1,031	De-crease, 4,076	De-crease, 301	De-crease, 2,444	In-crease, 8,681	In-crease, 8,860	De-crease, 63,347	De-crease, 930	Increase or Decrease in ULSTER in 1873.		
34,832 38,182	39,452 28,063	31,196 31,614	30,172 23,375	121,992 129,432	1,800,273 1,837,483	5,487,313 5,270,159	18,404 13,474	1872 1873	}	Total of IRELAND, 5,402,759
In-crease, 3,350	De-crease, 11,389	In-crease, 418	De-crease, 6,797	In-crease, 7,440	In-crease, 37,210	De-crease, 217,154	De-crease, 4,930	Increase or Decrease in IRELAND in 1873.		

GENERAL ABSTRACTS, for each County and Province

Number.	PROVINCES AND COUNTIES, WITH THEIR AREAS (including water) IN STATUTE ACRES.	HORSES, with the purposes for which it was stated they are kept, or intended by the Owners.						CATTLE		
		Two years old and upwards.			One year old and under two years.	Under one year.	Total Number of Horses.	Milk Cows.	Other	
		Agricultural.	Traffic and Manufactures.	Amusement or Recreation.					Two years old and up- wards.	One year old and under two years.
LEINSTER :										
1	Carlow, . . . { 1872, 221,342 acres, { 1873,	5,407 5,170	105 234	519 494	797 745	644 781	7,532 7,424	13,989 14,526	10,027 10,006	10,412 11,333
2	Dublin, . . . { 1872, 226,414 acres, { 1873,	5,870 6,139	9,791 9,564	4,023 3,739	603 756	400 601	20,843 20,799	14,766 15,380	22,771 22,985	7,655 9,061
3	Kildare, . . . { 1872, 418,436 acres, { 1873,	8,085 7,866	549 461	1,655 1,534	1,702 1,907	1,126 1,174	13,117 12,942	13,739 14,168	39,890 42,153	15,953 17,754
4	Kilkenny, { 1872, 509,732 acres, { 1873,	11,558 11,546	558 432	740 735	1,641 1,705	1,635 1,509	16,552 16,037	41,125 41,888	18,250 19,038	23,959 27,341
5	King's, . . . { 1872, 493,085 acres, { 1873,	8,856 8,593	348 426	597 599	1,653 1,681	1,443 1,389	12,697 12,688	15,632 16,149	23,329 26,472	14,912 16,579
6	Longford, . . { 1872, 269,409 acres, { 1873,	4,101 3,928	196 181	231 243	841 899	853 850	6,222 6,101	19,699 18,907	10,726 10,777	14,011 14,100
7	Louth, . . . { 1872, 201,722 acres, { 1873,	7,479 7,435	586 579	618 595	1,098 1,133	1,030 1,121	10,811 10,853	9,333 9,661	11,549 11,032	8,848 9,595
8	Meath, . . . { 1872, 580,083 acres, { 1873,	9,389 9,081	440 576	1,985 1,824	2,307 2,172	1,645 1,748	15,775 15,399	16,351 16,836	101,447 100,132	29,407 33,907
9	Queen's, . . . { 1872, 424,854 acres, { 1873,	8,848 8,950	339 268	809 810	1,585 1,378	1,303 1,348	12,874 12,754	22,372 22,029	23,122 22,887	16,363 17,742
10	Westmeath, . { 1872, 453,468 acres, { 1873,	6,904 7,090	361 275	931 804	1,658 1,690	1,404 1,510	11,318 11,299	16,499 16,303	39,546 41,795	21,933 23,161
11	Wexford, . . { 1872, 570,598 acres, { 1873,	19,657 19,171	553 440	1,064 1,069	2,603 2,468	2,263 2,297	26,140 25,445	39,831 40,725	16,665 17,150	21,065 26,306
12	Wicklow, . . { 1872, 500,178 acres, { 1873,	7,543 7,561	571 500	833 873	1,433 1,325	957 1,036	11,337 11,285	26,585 27,742	17,108 17,670	14,716 16,440
Totals of LEINSTER, { 1872, 4,876,211 acres, { 1873,		104,163 102,460	14,466 13,946	14,025 13,819	17,981 17,839	14,713 15,482	165,418 163,026	240,920 234,314	334,419 342,697	193,254 223,413
Increase or Decrease in LEINSTER in 1873, {		De- crease, 1,713	De- crease, 520	De- crease, 776	De- crease, 122	In- crease, 739	De- crease, 2,392	In- crease, 4,394	In- crease, 9,178	In- crease, 24,159

of the number of Live Stock in 1872 and 1873.

CATTLE.		SHEEP.				PIGS.			Years.	Population in 1871.	Number.
Under one year.	Total Number of Cattle.	One year old and upwards.		Under one year.	Total Number of Sheep.	One year old and upwards.	Under one year.	Total Number of Pigs.			
		Ewes.	Tups and Wethers.								
LEINSTER :											
11,297 11,777	45,724 48,542	24,299 28,631	15,051 16,801	22,975 27,472	62,928 72,904	3,643 2,602	23,100 18,409	26,743 21,011	1872 1873	} 51,472	1
6,427 7,139	51,619 54,556	30,802 36,235	20,133 22,739	23,294 29,249	74,289 88,223	3,496 2,780	24,116 17,013	27,612 19,793	1872 1873		} 405,625
10,791 11,696	80,363 85,503	56,867 64,052	36,646 45,054	48,808 57,148	142,421 166,854	2,485 1,827	14,618 11,623	17,103 13,450	1872 1873	} 84,198	
22,100 31,324	112,434 120,091	44,596 49,586	23,521 26,203	40,998 48,085	109,115 123,874	7,144 5,845	50,469 36,610	57,613 42,455	1872 1873		} 109,302
9,225 10,525	63,097 69,725	49,866 51,595	32,980 38,895	49,076 53,062	131,872 143,552	3,360 2,517	21,313 16,322	24,673 18,839	1872 1873	} 75,781	
14,951 14,261	59,387 58,045	13,296 13,316	6,234 8,020	12,587 13,142	32,117 34,478	2,432 1,805	17,365 12,190	19,797 13,995	1872 1873		} 64,406
6,269 6,561	35,999 37,449	26,454 27,609	3,886 5,622	23,377 23,937	53,717 57,168	1,655 1,354	14,370 11,363	16,025 12,737	1872 1873	} 79,422	
13,940 14,961	161,145 165,836	88,408 92,620	52,543 62,727	79,828 87,743	220,777 243,090	2,298 2,144	15,914 12,043	18,212 14,187	1872 1873		} 99,256
13,504 14,168	75,361 76,826	39,652 42,907	23,034 25,425	38,102 39,320	100,878 107,652	3,512 3,041	26,667 20,772	30,179 23,813	1872 1873	} 77,071	
15,791 15,003	93,789 97,162	49,422 54,118	46,484 50,156	55,961 59,431	151,807 163,705	1,758 1,229	18,613 14,059	20,371 15,287	1872 1873		} 78,416
25,167 31,082	105,728 115,355	55,692 63,789	27,858 32,613	52,305 63,145	135,855 159,547	10,341 8,126	66,779 52,732	77,120 60,858	1872 1873	} 132,506	
16,164 18,369	74,573 80,221	75,250 78,861	62,733 64,935	60,361 64,592	198,364 208,378	3,864 3,069	22,372 18,610	26,236 21,679	1872 1873		} 78,509
175,698 184,047	969,219 1,000,371	554,682 603,309	331,676 399,799	507,862 595,326	1,414,209 1,569,425	45,988 36,838	315,086 241,766	361,634 278,104	1872 1873	} Total of LEINSTER: 1,325,966	
In-crease, 12,421	In-crease, 50,152	In-crease, 48,647	In-crease, 48,114	In-crease, 58,464	In-crease, 155,225	De-crease, 9,650	De-crease, 73,930	De-crease, 83,580	} Increase or De-crease in LEINSTER in 1873.		

(continued on page 18.)

B

GENERAL ABSTRACTS, for each County and Province,

Number.	PROVINCES AND COUNTIES, WITH THEIR AREAS (including water) IN STATUTE ACRES.	HORSES, with the purposes for which it was stated they are kept, or calculated by the Owners.						CATTLE.		
		Two years old and upwards.			One year old and under two years.	Under one year.	Total Number of Horses.	Milk Cows.	Other	
		Agricultural.	Traffic and Manufactures.	Amusement or Recreation.					Two years old and up- wards.	One year old and under two years.
MUNSTER:										
1	Clare, . . . { 1872, 827,994 acres, { 1873,	11,050 10,858	369 411	670 641	1,609 1,990	1,670 1,703	15,368 15,503	58,571 58,566	31,333 31,626	36,584 41,326
2	Cork, E.R., . { 1872, 1,040,384 acres, { 1873,	22,837 21,807	1,920 2,086	2,425 2,344	3,768 3,719	3,321 3,430	34,471 33,395	99,109 90,269	20,113 20,861	26,982 35,402
3	Cork, W.R., . { 1872, 809,399 acres, { 1873,	15,077 14,589	339 387	661 644	1,493 1,580	1,975 2,118	19,550 19,318	82,552 81,636	13,386 12,375	21,907 25,268
4	Kerry, . . . { 1872, 1,185,917 acres, { 1873,	11,376 11,399	681 405	535 430	1,240 1,469	1,687 1,811	15,499 15,454	118,235 113,326	25,160 23,453	32,855 32,081
5	Limerick, . . { 1872, 681,112 acres, { 1873,	10,718 10,999	900 716	1,154 1,190	1,311 1,348	1,157 1,139	15,240 15,292	100,415 100,596	21,205 20,379	23,089 24,937
6	Tipperary, N.R. { 1872, 524,920 acres, { 1873,	8,840 8,834	326 225	783 737	1,482 1,548	1,206 1,419	12,609 12,761	32,433 32,443	23,841 25,552	22,109 24,569
7	Tipperary, S.R. { 1872, 536,811 acres, { 1873,	9,024 9,259	481 493	1,140 1,031	1,509 1,506	1,066 1,190	13,840 13,479	53,535 54,329	20,513 20,036	20,512 23,262
8	Waterford, . . { 1872, 461,553 acres, { 1873,	8,947 8,678	601 710	773 779	1,283 1,359	1,068 1,164	12,671 12,690	43,111 44,220	10,519 9,728	13,010 18,155
	Total of Munster, { 1872, 6,067,990, acres, { 1873,	96,469 96,423	5,597 5,433	8,142 7,796	13,790 14,237	13,430 13,683	139,339 137,093	535,961 534,365	166,070 166,267	197,447 227,990
	Increase or Decrease in Munster in 1873, {	De- crease, 2,046	De- crease, 164	De- crease, 346	In- crease, 507	In- crease, 553	De- crease, 1,446	De- crease, 1,576	In- crease, 137	In- crease, 30,453
CONNAUGHT:										
1	Galway, . . . { 1872, 1,566,354 acres, { 1873,	16,562 16,519	941 801	1,282 1,247	3,167 3,132	3,091 3,515	25,643 25,214	43,232 42,343	60,339 64,798	35,740 33,896
2	Leitrim, . . . { 1872, 392,363 acres, { 1873,	2,328 2,307	356 277	224 192	391 448	335 317	3,632 3,541	44,168 41,055	12,887 13,774	19,745 17,474
3	Mayo, . . . { 1872, 1,363,892 acres, { 1873,	13,414 12,751	481 621	581 574	1,755 1,545	2,041 2,381	18,872 17,872	60,626 56,621	50,737 54,094	35,841 32,824
4	Roscommon, . { 1872, 807,691 acres, { 1873,	4,722 4,898	361 333	728 849	1,301 1,191	968 1,065	8,080 8,138	32,384 30,579	27,028 27,091	25,635 24,618
5	Sligo, . . . { 1872, 461,733 acres, { 1873,	5,233 4,912	240 388	401 388	893 877	815 727	7,582 7,292	37,186 34,990	19,692 19,156	21,022 19,567
	Total of CONNAUGHT, { 1872, 4,392,043, acres, { 1873,	42,267 41,367	2,379 2,430	3,216 3,060	7,967 7,193	8,450 8,905	63,960 62,655	217,696 206,517	170,703 170,913	130,095 130,331
	Increase or Decrease in CONNAUGHT in 1873, . . . {	De- crease, 870	In- crease, 41	De- crease, 166	De- crease, 314	De- crease, 445	De- crease, 1,754	De- crease, 11,999	In- crease, 8,210	De- crease, 7,622

of the number of Live Stock in 1872 and 1873—continued.

		SHEEP.				PIGS.					
Cattle.		One year old and upwards.							Years.	Population in 1871.	Number.
Under one year.	Total Number of Cattle.	Ewes.	Tups and Wethers.	Under one year.	Total Number of Sheep.	One year old and upwards.	Under one year.	Total Number of Pigs.			
MONSTER :											
42,151	168,639	65,216	32,713	63,132	161,061	7,798	88,157	45,955	1872	}	147,994
43,210	178,728	60,387	37,020	65,129	171,536	6,278	27,344	33,622	1873		
59,889	197,093	89,355	20,317	83,949	193,621	19,490	89,714	100,204	1872	}	339,766
59,717	215,309	98,810	26,135	91,786	216,731	15,578	70,129	85,707	1873		
35,441	151,286	67,341	12,303	51,418	130,962	12,193	50,393	62,588	1872	}	176,280
37,301	158,583	63,396	11,997	50,349	125,742	8,675	42,142	50,817	1873		
48,595	222,845	60,470	19,336	38,242	118,048	11,911	50,210	62,121	1872	}	196,014
49,324	219,037	58,189	16,937	35,868	110,994	9,461	41,271	50,792	1873		
55,583	201,291	27,097	18,358	24,539	69,994	11,006	55,306	66,312	1872	}	191,313
54,863	210,989	30,936	19,946	27,427	78,309	8,653	43,320	51,973	1873		
21,419	99,802	54,952	26,217	54,387	135,556	4,779	35,114	39,893	1872	}	92,888
23,394	105,958	59,874	35,283	61,063	156,320	3,911	27,844	31,755	1873		
31,186	129,156	51,712	25,778	49,485	126,975	7,880	49,445	57,325	1872	}	123,324
39,188	138,815	57,070	30,939	55,345	143,354	5,979	34,611	40,590	1873		
20,618	87,258	22,748	6,765	21,252	50,763	8,609	48,768	57,377	1872	}	122,825
26,329	98,401	25,452	7,658	22,702	55,812	6,596	37,420	44,018	1873		
387,892	1,257,570	438,799	101,707	306,494	965,909	63,695	417,107	500,773	1872	}	Total of MUNSTER, 1,390,402.
343,228	1,321,626	463,214	105,915	409,609	1,068,799	66,131	394,081	389,312	1873		
In-crease, 35,430	In-crease, 64,450	In-crease, 24,425	In-crease, 24,128	In-crease, 23,265	In-crease, 71,819	De-crease, 18,535	De-crease, 93,028	De-crease, 111,561	Increase or De-crease in MUNSTER in 1873.		
CONNAUGHT :											
22,377	161,708	250,932	227,762	206,371	685,065	9,867	52,568	62,455	1872	}	248,257
22,325	165,364	264,949	236,658	211,257	712,864	7,664	43,157	50,821	1873		
26,411	105,211	9,701	3,027	9,207	21,935	3,783	21,941	25,724	1872	}	95,324
25,404	97,707	9,107	2,964	8,322	20,393	2,278	15,151	17,429	1873		
31,987	179,191	141,236	75,176	120,669	340,081	7,238	44,520	51,758	1872	}	246,855
27,394	170,933	133,415	72,414	107,937	313,766	5,745	35,670	41,415	1873		
22,278	107,345	69,879	63,100	65,103	198,082	3,814	28,566	32,380	1872	}	141,246
20,960	103,268	74,287	68,212	64,880	207,388	2,070	21,597	24,567	1873		
24,209	102,109	26,460	12,751	25,238	64,449	2,545	17,885	20,430	1872	}	115,311
24,386	96,708	27,324	13,940	25,382	68,646	1,801	13,523	15,413	1873		
129,262	655,564	498,208	384,816	425,538	1,389,612	27,267	165,490	192,747	1872	}	Total of CONNAUGHT, 845,993.
119,989	633,900	509,982	394,108	417,707	1,321,067	20,548	128,007	143,645	1873		
De-crease, 10,173	De-crease, 21,664	In-crease, 10,874	In-crease, 9,372	De-crease, 8,801	In-crease, 11,445	De-crease, 6,719	De-crease, 86,383	De-crease, 43,102	Increase or De-crease in CONNAUGHT in 1873.		

{continued on page 20.

B 2

GENERAL ABSTRACTS, for each County and Province,

Number.	PROVINCES AND COUNTIES, WITH THEIR AREAS (including water) IN STATUTE ACRES.	Horses, with the purpose for which it was stated they are kept, or intended by the Owners.						CATTLE.		
		Two years old and upwards.			One year old and under two years.	Under one year.	Total Number of Horses.	Milk Cows.	Other	
		Agricultural.	Traffic and Manufactures.	Amusement or Recreation.					Two years old and up- wards.	One year old and under two years.
ULSTER :										
1	Antrim, . . . { 1872, 761,803 acres, { 1873,	21,641	2,830	1,269	1,516	2,002	29,348	67,867	22,028	35,396
		21,363	2,928	1,199	1,863	1,853	29,308	65,715	21,845	34,767
2	Armagh, . . . { 1872, 328,076 acres, { 1873,	10,602	553	427	340	640	12,562	34,332	8,651	17,972
		10,078	450	434	442	544	11,948	33,612	9,831	18,868
3	Cavan, . . . { 1872, 477,360 acres, { 1873,	7,310	479	429	857	1,184	10,205	52,373	13,833	20,498
		7,051	380	476	939	1,178	10,024	50,478	15,082	23,763
4	Donegal, . . . { 1872, 1,193,443 acres, { 1873,	20,770	402	382	1,140	1,750	24,444	75,354	34,776	39,886
		20,108	471	335	1,272	1,510	23,696	72,249	35,159	38,257
5	Down, . . . { 1872, 612,495 acres, { 1873,	26,184	1,236	1,178	1,532	2,129	32,250	58,364	14,101	31,704
		25,889	1,284	1,042	1,697	2,136	32,048	58,364	16,020	31,279
6	Ferriarsagh, . . { 1872, 457,287 acres, { 1873,	5,028	158	338	376	488	6,988	47,517	14,987	15,313
		5,370	129	302	397	486	6,684	44,704	14,553	14,584
7	Londonderry, . . { 1872, 522,350 acres, { 1873,	17,531	496	531	1,175	1,788	21,821	47,032	14,621	23,420
		17,802	412	449	1,249	1,704	21,416	46,274	14,771	23,392
8	Monaghan, . . . { 1872, 319,757 acres, { 1873,	8,598	264	296	464	617	10,229	35,198	7,537	15,888
		8,465	169	347	541	778	10,209	34,595	9,069	19,196
9	Tyrone, . . . { 1872, 806,296 acres, { 1873,	20,918	519	559	1,006	1,491	24,493	80,250	18,176	33,637
		20,019	688	533	1,089	1,421	23,750	76,214	18,123	33,425
	Total of ULSTER, 5,478,867, acres, { 1872, { 1873,	139,478 135,947	6,957 6,916	5,469 5,117	8,436 8,089	12,140 11,710	172,409 169,173	498,907 482,305	148,730 154,423	283,174 280,571
Increase or Decrease in ULSTER in 1873, {		De- crease, 3,531	De- crease, 27	De- crease, 292	In- crease, 1,053	De- crease, 439	De- crease, 3,236	De- crease, 16,102	In- crease, 5,689	In- crease, 7,597
TOTAL OF IRELAND, 20,815,111 acres, { 1872, { 1873,		384,367 376,397	22,379 22,709	20,862 20,232	47,024 48,798	66,742 49,150	610,974 582,146	1,551,784 1,526,501	819,922 848,140	767,878 822,263
Increase or Decrease in IRELAND in 1873, {		De- crease, 8,160	De- crease, 670	De- crease, 1,580	In- crease, 1,174	In- crease, 408	De- crease, 8,828	De- crease, 25,283	In- crease, 23,218	In- crease, 54,357

of the number of Live Stock in 1872 and 1873—continued.

Cattle.		SHEEP.				PIGS.			Years.	Population in 1871.	Number.
		One year old and yearlings.		Under one year.	Total Number of Sheep.	One year old and yearlings.	Under one year.	Total Number of Pigs.			
		Ewes.	Stags and Wethers.								
ULSTER:											
41,265	166,556	43,273	11,139	33,873	94,285	6,572	47,561	54,133	1872	}	403,630
40,890	163,207	41,462	14,993	40,323	96,778	4,725	57,209	41,934	1873		
20,428	81,403	6,348	1,319	6,617	14,184	3,782	21,212	24,094	1872	}	179,221
21,142	84,453	7,709	1,440	6,783	15,932	2,554	13,662	16,216	1873		
35,866	122,590	11,432	2,327	12,060	24,839	7,541	35,680	43,221	1872	}	140,555
33,748	123,011	12,737	2,982	12,405	28,124	6,013	25,459	31,472	1873		
42,044	191,760	97,412	41,986	70,018	209,416	4,252	31,247	35,499	1872	}	217,992
38,293	183,958	89,712	33,710	58,952	182,374	3,072	17,817	20,889	1873		
37,664	141,833	31,909	11,238	20,435	72,042	5,980	45,789	51,769	1872	}	293,927
39,132	146,895	32,603	9,776	31,718	74,157	4,014	28,793	32,807	1873		
30,949	108,766	7,264	1,907	7,562	16,733	2,542	20,197	22,739	1872	}	92,688
39,139	102,979	6,078	2,069	6,955	10,002	1,746	13,894	15,640	1873		
28,001	113,074	20,923	5,077	19,468	45,463	4,450	28,146	32,596	1872	}	173,932
28,188	112,925	22,139	5,528	18,663	46,330	3,754	17,966	21,720	1873		
23,010	81,833	7,750	1,627	8,587	17,964	3,158	22,850	26,008	1872	}	112,785
23,132	85,962	8,309	1,550	9,231	19,090	2,625	17,031	19,656	1873		
47,806	175,929	24,552	9,296	22,081	55,931	5,913	36,585	42,408	1872	}	215,668
46,377	174,130	23,644	9,529	20,813	53,986	3,482	21,467	24,949	1873		
307,933	1,187,244	250,823	85,918	215,721	552,483	41,869	263,217	332,257	1872	}	Total of ULSTER.
300,669	1,177,329	246,335	81,577	205,843	532,773	31,965	193,298	225,233	1873		
De- crease, 7,003	De- crease, 10,015	De- crease, 5,470	De- crease, 4,341	De- crease, 9,878	De- crease, 19,689	De- crease, 12,105	De- crease, 95,979	De- crease, 108,084	} Increase or De- crease in ULSTER in 1873.		
918,813	4,050,397	2,742,682	804,197	1,534,575	4,263,254	291,011	1,167,669	1,383,571	1872	}	Total of IRELAND.
390,494	4,142,409	1,820,958	1,061,470	1,369,626	4,402,633	154,092	686,242	10,62244	1873		
In- crease, 30,661	In- crease, 83,003	In- crease, 78,476	In- crease, 77,273	In- crease, 63,050	In- crease, 218,799	De- crease, 47,009	De- crease, 299,310	De- crease, 348,327	} Increase or De- crease in IRE- LAND in 1873.		

Number of Irish Emigrants from each Province during the first SEVEN Months of 1872 and 1873, and the Increase or Decrease in the latter Year, compiled from Returns obtained by the Constabulary, who acted as Enumerators at the several Irish Ports.

Months.	PROVINCES.											
	LEINSTER.				MUNSTER.				ULSTER.			
	1872. Persons.	1873.	In- crease.	De- crease.	1872. Persons.	1873.	In- crease.	De- crease.	1872. Persons.	1873.	In- crease.	De- crease.
January, .	391	300	.	91	434	339	.	95	1,447	1,477	30	.
February, .	553	452	.	101	464	462	.	2	1,466	1,313	.	153
March, .	1,415	1,610	195	.	1,345	1,626	281	.	2,497	3,077	580	.
April, .	4,645	3,775	.	870	3,759	3,102	1,343	.	5,450	5,790	340	.
May, .	3,268	4,065	797	.	2,602	5,172	2,570	.	5,619	5,809	280	.
June, .	2,125	1,924	.	301	1,412	2,604	1,192	.	3,656	3,212	.	444
July, .	1,285	1,384	129	.	1,025	1,583	558	.	2,576	2,598	22	.
Total,	13,652	13,410	.	242	11,041	16,893	5,847	.	22,711	23,365	655	.

Months.	CONNAUGHT.				FROM WHAT PROVINCE NOT STATED.				IRELAND.			
	1872.	1873.	In- crease.	De- crease.	1872.	1873.	In- crease.	De- crease.	1872.	1873.	In- crease.	De- crease.
January, .	164	152	.	12	.	1	1	.	2,436	2,269	.	167
February, .	292	329	37	.	7	4	.	3	2,782	2,560	.	222
March, .	1,041	1,578	537	.	4	6	2	.	6,302	7,897	1,595	.
April, .	2,984	4,590	1,615	.	36	.	.	36	16,874	19,266	2,392	.
May, .	1,590	3,693	2,103	.	1	27	26	.	13,080	18,856	5,776	.
June, .	915	1,622	707	.	.	30	30	.	8,168	9,292	1,124	.
July, .	533	805	272	.	24	11	.	13	5,413	6,381	968	.
Total,	7,519	12,770	5,259	.	72	79	7	.	54,695	66,521	11,826	.

The entire number of emigrants (*Irish*) from Ireland, since May, 1851—the period when the Enumeration commenced—to the 31st July last, was 2,229,117; of whom 1,190,673 were males, and 1,038,444 were females.

APPENDIX.

EXTIRPATION OF WEEDS.

THE following extracts from the writings of the celebrated Sir John Sinclair and other distinguished individuals, and also copies of correspondence with public bodies and many eminent persons, with regard to the great importance of eradicating weeds, which were published in the General Abstracts of Tillage and Live Stock submitted by me to the Lord Lieutenant [the late Earl of Carlisle, K.G.], for the years 1856 and 1857, are now reprinted, in the hope that they may prove useful to all those engaged in the cultivation of land, by directing more earnest attention to the subject, and inducing a general determination to extirpate weeds from not only the tillage and grass lands, but also from the highways, sides of railways, canals, and waste lands of Ireland:—

MEASURES TAKEN TO EFFECT THE DESTRUCTION OF WEEDS.

Your Excellency is aware that in connexion with the Agricultural Statistics, I have, for the last four years, had returns made to me by the Constabulary, showing the extent to which weeds are permitted to grow, and, in most cases, *to shed their seeds*, on the sides of highways, railways, and canals, as well as on the various farms of the country. On this subject I have the honour to give, in the Appendix, copies of two letters addressed by me to their Lordships, Her Majesty's Judges of Assize, also of circulars to the County Surveyors, and to the directors of every railway and canal in Ireland; and I beg to take this opportunity of acquainting your Excellency how deeply sensible I am of the kind and considerate manner in which my request to the Judges to bring the subject before the various Grand Juries was received and acted upon by their Lordships, not only on the last Spring circuit, but more particularly during that lately concluded; and I am informed, by communications from almost every county, that the several Grand Juries have given directions to the County Surveyors to take all necessary steps to prevent the great injury to the farming classes which has hitherto arisen from the growth of weeds along the sides of public roads. I would here take the liberty of remarking that your Excellency's observations at the meeting of the Royal Dublin Society last April, and also at the late cattle show of the Royal Agricultural Society, at Athlone, as to the lamentable prevalence of weeds in Ireland, have had the happiest effect. In answer to the circular which I took the liberty of addressing to the directors of railways and canals, I have to acknowledge the receipt, in several instances, of very courteous replies; copies of these I have felt it to be my duty to forward for insertion in the public papers, feeling that the assistance of the Press, which has hitherto

been most liberally afforded to me on all occasions, is of the greatest importance, by making generally known the great injury and loss which arise from the unchecked growth of weeds on the farms and along the highways of the country. Every observer, and even the general traveller, must be struck with the neglect on this important matter, which, with few exceptions, exists in almost every part of Ireland.

I beg to mention that, having brought this subject before the Commissioners of National Education,* and suggested to them the many advantages that must arise by instructing their teachers to direct the attention of the children in the numerous schools under their control to the importance of destroying weeds when found growing on their parents' farms, I have received a reply* promising every assistance in the matter, and have furnished to Mr. Macdonnell, the Resident Commissioner, 1,000 copies of my circular to County Surveyors, to be distributed by the teachers then in training, on their return home; and I have learned that 6,000 of these circulars have since been procured by the Commissioners, for circulation amongst their schools. The Committee of the Church Education Society have also promised their valuable assistance with the pupils in their schools, and also the Poor Law Commissioners,† through the medium of the masters and teachers in workhouses, by instructing the children in attendance as to the advantages which must arise to the community by the practice of destroying weeds. The Governors of Erasmus Smith's Schools‡ have also promised their friendly aid.

The Masters in Chancery,§ upon all of whom I waited personally, have unanimously taken the subject into their consideration, and, I am informed, purpose recommending that an order should be issued requiring receivers over the estates under the Court to use their influence with the tenantry to keep their farms free from weeds.

The Commissioners of Public Works|| have also directed the removal of weeds from all works in progress under their control—such as those of arterial drainage, roads, &c.

Copies of my correspondence with Her Majesty's Judges, and with the several public bodies and other parties, upon the subject of the destruction of weeds, are given at pages 36 to 40; and I trust they will not be considered undeserving of attention.

The following extract from the works of that eminent man and real patriot, Sir John Sinclair, first President of 'The Board of Agriculture,' quoted in the 'Rural Cyclopædia,' will be read with interest, as exhibiting the immense loss¶ arising from the neglect of removing weeds from growing crops, and is highly valuable, as being the record of actual experiment:—

Sir John
Sinclair
on the
destruction
of Weeds.

"All plants which grow naturally among a crop that has been sown, may be regarded as enemies to that crop. The destruction of such plants, therefore, must be considered as one of the most important branches of the agricultural art; for if that is neglected, or even but

* See pages 39 and 40.

† See pages 40 and 41.

‡ See page 41.

§ See page 42.

|| See page 38.

¶ See an able article on this subject in the *Freeman's Journal* of the 27th of August, 1856.

Sir John
Sinclair
on the
destruction
of Weeds.

"slovenly performed, the crops may be reduced to the amount of one-fourth or one-third of a fair average crop, even upon the very best soils. Besides, it merits consideration, that if weeds are suffered to exist, the full advantages of manuring land, and many other improvements, can only be partially obtained. Nor is this all: the mixture of weeds in the soil prevents the crops from receiving the beneficial influence of the atmosphere,—sucks up that moisture so essential for the growth of the crop sown,—tends more than any other circumstances to injure the crop when lodged by violent winds or heavy rains,—augments the risks at harvest (for a crop that is clean may be ready for the stack-yard in much less time than is required to harvest it when incumbered with weeds),—and the seeds of these intruders deteriorate the quality of the grain. Notwithstanding all the injuries thence sustained, how many are there who hardly ever attempt to remove weeds in an effectual manner! This negligence is the more to be blamed, because, were farmers at the trouble of collecting all sorts of weeds before they had formed their seeds, and of mixing them with rich earth, with lime, or fermenting them with dung, they would soon be reduced into a soft pulpy mass, and in this way a pernicious nuisance might be converted into a valuable manure. Various experiments have been tried, to ascertain the positive advantage derived from carefully weeding one part of a field, and leaving another part undone; among these, the following, made with peculiar accuracy, may be safely relied on:—

"1. Seven acres of light gravelly land were fallowed, and sown broadcast with wheat; one acre was measured off, and not a weed was pulled out of it; the other six were carefully weeded. The unweeded acre produced 18 bushels; the six weeded acres 135 bushels, or $22\frac{1}{2}$ per acre, which is $4\frac{1}{2}$ bushels, or $\frac{1}{2}$ more produce in favour of weeding.—2. A six-acre field was sown with barley, in fine tilth, and well manured. The weeding, owing to a great abundance of charlock, cost 12s. per acre. The produce of an unweeded acre was only 13 bushels; of the weeded, 28. Difference in favour of weeding, 15 bushels per acre, besides the land being so much cleaner for succeeding crops.—3. Six acres sown with oats, one acre ploughed but once, and unmanured, produced only 17 bushels. Another six acres, ploughed three times, manured, and weeded, produced 37 bushels. This experiment proves, that oats require good management, and will pay for it as well as other crops. Ten bushels of the increased produce may be fairly attributed to the weeding, and the other ten to the manure.

"The importance of weeding, both to the individual and to the public, is such, that it ought to be enforced by law. At any rate, a regulation of police, for fining those who harbour weeds, the seeds of which may be blown into their neighbours' ground, can have no injustice in principle. In England, the petty constable might be required, by precept from the high constable, to give in presentments to the Quarter Sessions, containing a list of all persons who suffered weeds to run to seeds in their hedges or lands, such presentments to be particularly specified to the Court. Those referring to the coltsfoot, to be given in at the Lady-day sessions; and those referring to thistles, rag-weed, &c., to be given in at the Midsummer sessions. An order of Court might then be made for the immediate removal of such nuisances; and if not complied with, the offender should be fined a sum not exceeding five pounds, one-half to the informer, and the other half to go for the relief of the

Sir John
Sinclair
on the
destruction
of Weeds.

"poor. If, in consequence of such a system being enforced, *from four to five bushels of wheat, fifteen bushels of barley, and ten bushels of oats additional* were raised in *all the fields* in the kingdom, whose crops are *injured by weeds*, the benefit would be well worth the labour and expense, and the farmers would soon find that however anxious they may be to have their lands title-free, yet to have them weed-free is of still greater importance. On the whole, keeping his land in a clean state ought to be a principal object with every farmer; and if this be not carefully attended to, he may rest assured of paying dearly for his neglect. But the losses which he suffers do not remedy the injury which the public sustains from his slovenly conduct.

"In several countries the legislature has interposed its authority for the destruction of weeds. By a regulation in France, *a farmer may sue his neighbour, who neglects to destroy the thistles upon his land at the proper seasons, or may employ people to do it at the other's expense.* In Denmark, there is a law to oblige the farmers to root up the corn marigold, *Chrysanthemum segetum*. But the oldest regulation for that purpose was probably in Scotland; a statute of Alexander II., about the year 1220, having been directed against that weed, which was considered to be peculiarly pernicious to corn fields. The statute is very short, and ably expressed. *It denounces that man to be a traitor 'who poisons the king's lands with weeds, and introduces into them a host of enemies.'*—Bondsmen who had this plant in their corn, were *fined a sheep for each stalk*. Under the authority of that law, Sir William Grierson, a Scottish baron, was accustomed to hold *Goul* courts, for the express purpose of fining the farmers in whose growing crops three heads or upwards of that weed were found. Such a plan, if generally adopted, would soon extirpate weeds; and as by a *clause introduced into many leases* (and which ought to be universal), the landlord is empowered to *cut down these weeds, at the expense of the tenant*, if the latter neglect to do it himself, it is much to be regretted that so useful a regulation should not be generally enforced. The policy of some legislative provision for this purpose has been frequently suggested. A clause enforcing the extirpation of weeds in hedges along the sides of roads, passed the House of Commons, but was thrown out by the Lords. It is to be hoped that so useful a measure, even on a more extensive scale, will soon be passed into a law. By some it is recommended that the destruction of weeds on the sides of roads should be done at the parish expense; others, by the road-surveyors, and the expense to be stated in their accounts.

"Though it is impracticable to extirpate annual weeds altogether, either by summer fallow or turnip culture, yet the number of weeds may be so much lessened, by these means, as to prevent them from materially injuring corn crops. Two measures are necessary for that purpose,—first, to bring the seeds within the limits of vegetation; and secondly, to *destroy every weed that vegetates*, thus regularly lessening the original stock. As the seeds of annual weeds are naturally furnished with the means of preservation while stored in the ground, it is absolutely necessary to bring them into life before their destruction can be effected. This is accomplished by the operations of ploughing, harrowing, and rolling, by which the ground is pulverized and reduced, whilst the seeds are brought to the surface, or so near it as to allow their speedy vegetation. All the seeds within two or three inches of the surface, may be expected to vegetate according to circumstances, such as richness of soil, fineness of mould, and the degree of moisture which may prevail when the above processes are executed. When the first crops of

"weeds appear above the surface, a second ploughing should be given, by Sir John
 "which that crop will instantly be destroyed, and a foundation laid for Sinclair
 "producing another crop. Harrowing and rollings should again be resorted on the
 "to; and in this way, several crops may be annihilated, in warm and destruction
 "moist seasons, before the turnips are drilled, more especially if attention of Weeds.
 "has been paid to harrow and roll the land after every ploughing, so that
 "sufficient moisture may be preserved to insure vegetation. When under
 "turnips, both the hand and horse hoe should be constantly employed
 "whenever weeds appear; and upon no account should a single one
 "be allowed to run to seed. *By paying due attention to these measures,*
 "*many farms which formerly were a nest of seed-weeds, are now brought*
 "*into such order that the weeds are kept under subjection and easily man-*
 "*aged.* In this way the destruction of many annual weeds may be accom-
 "plished, before the turnip-seed is sown, and the seeds of almost every
 "annual weed locked up in the ground, may be brought to the surface,
 "and within the reach of vegetation. Besides, the several horse and hand
 "hoings given to the turnip crop, serve to destroy every annual weed as
 "fast as it appears; and if the seed-furrow given the corn crop which
 "succeeds the turnips, is not taken deeper than the horse-hoeing furrow
 "(and a greater depth is unnecessary), few weeds will appear in the corn
 "crop which afterwards follows. As grass-seeds are always sown in the
 "improved districts, with the corn crop that succeeds turnips, no annual
 "weeds can appear in that season; but it very often happens in the suc-
 "ceeding year, from ploughing the clover-stubble a little deeper than the
 "seed-furrow given to the crop which succeeded turnips, that a fresh
 "growth of annual weeds make their appearance. To get the better of
 "these enemies some experienced farmers have hand-weeded the crops
 "which followed clover; at an expense not less than from ten to twenty
 "shillings per acre, and evidently much to their advantage; whilst others
 "have resorted to the drill husbandry to get quit of annual weeds. The
 "great object of both was, to procure clean crops, each being perfectly satis-
 "fied that if their crops were full of weeds, the productive powers of the
 "soil would not only be deteriorated, but that the amount or value of those
 "crops would be also considerably lessened.

"Owing to the nature of the soil and climate, many perennial weeds
 "are much more abundant in Scotland, and also in Ireland, Wales, and
 "the north and north-west of England, than in other countries, where the
 "soil is drier, and the climate more temperate. * * *

"With regard to docks and thistles, the method of getting rid of them
 "is perfectly obvious; all that is required being to follow the ground well
 "in the first instance, and to exterminate the plants afterwards whenever
 "they appear. This may be accomplished by pulling them up by the root,
 "in every corn field, when the weather is moist, and cutting them over in
 "all the grass lands before they have perfected their seeds; though cutting
 "should only be resorted to when the weather is so dry as to prevent pulling
 "these weeds out of the ground. The same attention ought to be paid to the
 "destruction of nettles, ragweeds, mugwort, and the mountain daisy. Every
 "one of these weeds ought to be pulled up by the root, if that measure can
 "be accomplished; but where that is impracticable, they ought to be regularly
 "cut down by the scythes, in which way their increase will at least be pre-
 "vented. This operation should always be performed before their seeds
 "arrive at maturity, otherwise the ground may thence be stocked with fresh
 "seed, to an extent not much less than if the cutting process had been
 "neglected."

Fecundity
of Weeds.

The injurious effects of weeds are scarcely to be wondered at, when their extraordinary and almost *incredible fecundity* is taken into consideration. The following table (with the exception of the Irish names, for which I am indebted to Dr. O'Donovan and Mr. Eugene Curry, M.R.L.A.) is taken from Professor Buekman, as quoted in the *Gardener's Chronicle and Agricultural Gazette* on the 12th of July, 1856:—

"Seeding of Weeds.—One of the most fertile sources of the continuation of weeds is that of constantly *allowing them to seed on the land*. Now the enormous increase which may result from seeding may be gathered from the following table of observations made upon a few of our common species:—

Botanical Name.	Irish Name.	Common Name.	No. of Flowers.	No. of Seeds each Flower may bear.	No. of Seeds on a single Plant.
<i>Senecio vulgaris</i> . . .	Gruanng, . . .	Groundsel, . . .	180	× 50	= 6,500
<i>Stellaria media</i> . . .	Fliodh, . . .	Chickweed, . . .	50	" 10	" 500
<i>Agrostemma githago</i> . . .	Cogul-arbhair, . . .	Corn cockle, . . .	7	" 370	" 2,590
<i>Lycnis cloia</i> . . .	Rós-fadhbain, . . .	Campion, . . .	25	" 137	" 3,425
<i>Papaver rhoeas</i> . . .	Cailein dearg, . . .	Red poppy, . . .	100	" 500	50,000
<i>Sinapis arvensis</i> . . .	Carran beidhe, . . .	Charlock, . . .	400	" 10	" 4,000
" <i>nigra</i> . . .	Sgeallar dubh, . . .	Black mustard, . . .	200	" 6	" 1,200
<i>Galium tricornis</i> . . .	Coimlench leaptha, . . .	Corn bed-straw, . . .	100	" 2	" 200
" <i>aparine</i> . . .	Luibh-an-ladhair, . . .	Clivers [Cleavers], . . .	550	" 2	" 1,100
<i>Sonchus arvensis</i> . . .	Fothannan, . . .	Corn sow-thistle, . . .	100	" 190	19,000
<i>Carduus nutans</i> . . .	Fothannan cumhra, . . .	Musk thistle, . . .	25	" 150	3,750
<i>Ethusa cynapium</i> . . .	Fionnas, . . .	Field's parsley, . . .	300	" 2	" 600
<i>Erum tetraspermum</i> . . .	Roilleith, . . .	Tare, . . .	40	" 3	" 180
<i>Daucus carota</i> . . .	Carrán Fíadhbain, . . .	Wild carrot, . . .	600	" 2	" 1,200
<i>Pastinaca sativa</i> . . .	Meicneadhain, . . .	Wild parsnip, . . .	600	" 2	" 1,200

"Now, it is not likely that each individual plant would always perfect the quantities of seeds above tabulated; but the list gives a pretty accurate notion of the numbers of seeds which might be perfected under circumstances favourable to their development, and from it will at once be gathered the important practical fact that, allowing for the casualties to which seeds are constantly liable, yet enough would be left, where seeding is allowed but for a *single year*, to give trouble for *many years after*.

"It cannot be too earnestly urged THAT WEEDS BE DESTROYED BEFORE THEIR SEEDS ARE RIPE, OR INDEED NEARLY RIPE, as the ripening process is often completed by the juices in the stems, especially of pulled weeds: hence groundsel and thistles, when pulled and laid by, as we saw last year, yet ripened much seed; and their involucrea, opening in the sun, were wafted on the breeze to an indefinite distance; and it should be recollected that one—the primary head—may ripen long before the rest, so that a tolerable weed-growth may follow from a delay which has allowed only this one head to perfect its seed. Each plant of groundsel might in this way be increased 50 fold, each plant of corn sow-thistle 190 fold, and a single head of musk-thistle may produce an increase of 150 fold."

And in the number of the same useful periodical for November 18, 1854, another list of weeds is given, from which the following are selected:—

Botanical Name.	Irish Name.	Common Name.	Number of Seed vessels or Flowerlets to each Plant.	Number of Seeds to each Vessel or Flower.	Number of Seeds to each Plant.	When gathered in 1854.
<i>Capsella bursa pastoris</i> .	Sraidie.	Shepherd's purse.	150	30	4,500	Sept. 9
<i>Sisymbrium officinale</i> .	Lus-an-air.	Common hedge mustard.	450	12	5,400	Oct. 13
<i>Hemidrum spondylium</i> .	Goran (or Goranach).	Cow parsnip.	2,500	2	5,000	Aug. 17
<i>Convolvulus arvensis</i> .	.	Corn bind weed.	200	3	600	Sept. 26
<i>Galeopsis ladanum</i> .	Neanntog.	Henbit nettle.	500	4	2,000	.
<i>Bartsia odontites</i> .	.	Red bartsia.	400	12	4,800	Oct. 1
<i>Leontodon taraxacum</i> .	Castacorbham.	Dandelion.	12	170	2,040	.
<i>Centaurea jacobea</i> .	Gob-na-Ghinsin.	Hardhead scabiosa.	50	80	4,000	Sept. 10
" <i>zigra</i> .	.	Blackhead.	50	60	3,000	.
<i>Asteris cotula</i> .	Brean-lus.	Stinking chamomile.	271	150	40,650	Sept. 23
<i>Matricaria chamomilla</i> .	Moldfar.	Mayweed.	150	300	45,000	Oct. 14
<i>Chrysanthemum leucanthemum</i> .	Easpag-ban.	Ox-eye daisy.	45	300	13,500	Sept. 18
<i>Achillea lupula</i> .	Copog trathall.	Burdock.	613	40	24,520	Oct. 1
<i>Scirpus oleaceus</i> .	Bleacht Fheothadun.	Sow thistle.	100	250	25,000	Sept. 6
<i>Carduus aculeatus</i> .	.	Stemless thistle.	6	100	600	Sept. 8
<i>Papaver dubium</i> .	.	.	100	600	60,000	Oct. 14
<i>Rumex obtusifolius</i> .	Copog sraide.	Common dock.	18,000	.	18,000	Sept. 15
<i>Euphorbia exigua</i> .	.	Dwarf spurge.	500	3	1,500	Sept. 19
" <i>peplus</i> .	Gaircinn.	Potty spurge.	400	3	1,200	Sept. 11
" <i>helioscopia</i> .	.	Sun spurge.	324	3	972	Oct. 14
<i>Lapsana communis</i> .	Duillioag bhaighte.	Nipple wort.	560	15	8,400	Sept. 23

Annexed are the names of some of the most noxious weeds, with compound flowers, which I have been informed by Doctor Mackay, author of the 'Flora Hibernica,' grow wild in Ireland, and all of which produce seeds in the greatest quantity:—

COMMON NAMES.

BOTANICAL NAMES.

- | | |
|------------------------------|-------------------------------------|
| 1. Spear plume thistle. | <i>Cnicus lanceolatus</i> . |
| 2. Marsh plume thistle. | <i>Cnicus palustris</i> . |
| 3. Creeping plume thistle. | <i>Cnicus arvensis</i> . |
| 4. Watted thistle. | <i>Carduus acanthoides</i> . |
| 5. Slender-flowered thistle. | <i>Carduus tenuiflorus</i> . |
| 6. Dandelion. | <i>Leontodon taraxacum</i> . |
| 7. Ox-eye daisy. | <i>Chrysanthemum leucanthemum</i> . |
| 8. Corn marygold. | <i>Chrysanthemum segetum</i> . |
| 9. Rough hawkbit. | <i>Apargia hirta</i> . |
| 10. Autumnal hawkbit. | <i>Apargia autumnalis</i> . |

Of so much importance has the eradication of weeds been considered in the Colony of Victoria, that an Act has been recently passed to insure their destruction; the owner or occupier of the land on which they grow may be ordered by a Justice of the Peace to destroy them, and is liable to a fine if he does not comply—a course which, if followed in this country, would be gratefully received by the farming classes, and be productive of

great national benefit, as, according to the experiments of Sir John Sinclair, already referred to, the land, WHEN KEPT FREE FROM WEEDS, WILL YIELD A MUCH GREATER AMOUNT OF PRODUCE.

It will be gratifying to your Excellency to learn that, in addition to the letters given in the Appendix, promising assistance in the improvement of Irish agriculture, by the eradication of weeds, I have received from very many influential parties, to whom I am personally unknown, communications expressive of their entire approval of what has been termed by some of them the 'National Crusade against Weeds.' I also learn, from copies of almost every journal in Ireland, kindly sent to me by the editors, that the Press has, without exception, given its powerful aid to the same object—one which most happily has received your Excellency's marked approbation. And I confidently trust, from the opinions so unequivocally expressed in every quarter, that much and permanent good will be effected by bringing the present great neglect on this subject prominently under public observation.

In the observations on the Agricultural Abstracts for last year [1856] I had the honour of stating the measures taken by me to call public attention to the great injury and loss caused by the non-removal of weeds from farms and the sides of high roads, railways, and canals. I am now informed, that in some localities improvement has taken place; but on account of the unchecked growth of weeds in so many places, as well as in the fields and hedge-rows of the slovenly and careless farmer, the efforts of those desirous to effect their eradication are, in a great measure, frustrated. To the extensive circulation of the information given in the Abstracts for 1856, as authorized by your Excellency, and to the able appeals on the subject which have appeared in the public press, this improvement may be attributed; *until legislation, however, affords some remedy to those who keep their lands free from weeds against such parties as allow them to grow and seed, to the injury of the adjoining lands, the practice of clean agriculture in Ireland cannot, I fear, be hoped for*; because, if a farmer sees that the expense which he incurs in removing weeds is thrown away, owing to his careless neighbour poisoning the fields around with the seeds of noxious plants, he will naturally feel that it is hopeless to eradicate them, as they are replaced by the vigorous stock growing on his neighbour's holding. With a view to keep this subject before the agricultural community, I, last spring, issued a circular to the several Assistant Barristers, soliciting their aid. It was most courteously received, many of them having addressed the parties attending Quarter Sessions, on the great advantages which must arise, owing to the increased yield of land when kept free from weeds, as is clearly shown by the experiments of that eminent and distinguished man, the late Sir John Sinclair. [See page 25.]

So important has this subject become, that for an essay upon it a prize was awarded by the Royal Agricultural Society of England last year;—the successful author, Professor Buckman, of the Royal Agricultural College, Cirencester, gives the following practical methods for removing weeds from the soil:—

On the Extirpation of Weeds.—The extirpation of weeds would appear “in theory a much easier matter than in practice it is found to be, for the seeds of wild plants constituting weeds are so universally distributed, that, though they may differ in kind at different places, yet, wherever a crop will grow, there also will weeds flourish, if allowed. There would also appear to be species of weeds peculiar to certain crops, species which appear in one crop and not in another; the charlock is a familiar example of this, as it will often make its appearance in great quantities after the breaking up of pasture or old sainfoin lea, where it had not been observed before for years. Evidence of this may also be obtained from the vast quantities of wild plants which spring up in woods after trees and underwood have been removed; so quickly and so abundantly, indeed, as to convince us that their seeds must have lain dormant, only awaiting the required circumstances to vegetate. Newly-formed earthworks frequently cause the sudden growth of wild plants, which have never before been observed in the district. Hence, however careful we may be to destroy weeds in one crop, we shall assuredly have some fresh species with the next, as well as fresh plants of the same, in consequence of dormant seeds having been brought within the power of growth by newly stirring the soil; from which it is obvious that weeds are not to be eradicated by one effort, however vigorous it may be.

“The getting rid of weeds would appear to resolve itself into the two following heads:—

“1st. *Destroying those already in the soil.*

“2nd. *Preventing others being sown.*

“The first of these must be considered with reference to those weeds which are already rooted in the soil, that is, weeds of a perennial character, as well as those annual weeds the seeds of which have been scattered at different periods.

“Perennial and deep-rooted weeds can only be got rid of by properly preparing the fallows, to which end farm-work should always be got as forward as possible. One of the most common causes of the continuance of weeds is, that work is delayed until it is time to get in the seed for the crop, when untoward weather, want of time, or some other cause, prevents the possibility of that thorough cleaning which is necessary to get rid of weeds. *Seed is thus put into foul land, which must wait until a more convenient season for being cleaned.*

“In the usual process of arable farming, preparation of the soil by ploughing, scuffling, harrowing, and exposure to sunshine and drought, clears the land of a great quantity of weeds; but if we observe the depth to which the underground stems of couch, coltsfoot, bindweed, and such-like plants penetrate, we shall see at once that this is not sufficient to exterminate the enemy; but, having done this in the most careful manner, we may observe that there are still spots left here and there in a field where these weeds flourish. Now, it appears to me that the best method of dealing with a case like this, is to go carefully over the ground after the crop is removed, and dig up the weed-patches with a three-pronged fork. With this implement they can be followed in their direction and depth; and thus, by a simple employment of day-labour, these isolated nurseries of mischief may, if not too numerous, be readily, perfectly, and cheaply broken up. Indeed there is no mode so efficient as this; and, from long observation of the natural history of weeds of this kind in arable fields, I am convinced that more may be done by the fork towards the complete eradication of deep-rooted weeds than by any other means.

“There are some of these deep-rooted weeds which are exceedingly

"troublesome in pastures, such as the stinging-nettle, butter-bur, and bistort. These occur in patches, some in the corners of the field, others in wet places, while the bistort will be found occupying isolated spots in the centres of meadows. These cannot well be attacked by digging them up. The best plan of treating them is to regularly mow them down, when their stems grow a few inches above the surface of the ground. The principle upon which this is recommended is, that the leaves are absolutely necessary to the extension of the whole of the parts of a plant; if, therefore, these are continued to be destroyed in proper time, the extinction of the underground stems is ultimately insured; it will not do, however, to leave them until the usual period of mowing, as at that time the plants will have advanced to maturity, and the leaf function have been fully performed. An observance of this law will be of great use in destroying many weeds, in situations where the roots cannot be got at; let it simply be borne in mind, *as the leaves are the lungs of the plant, never in such cases to allow the lungs to develop themselves.*

"*The prevention of Weeds-sowing.*—Weeds are constantly being sown under many circumstances, the chief of which may be stated as follows:—

"*Weeds are sown with the seed for the crop.*

"*Weeds are spread over the land by manures.*

"*Weeds are perpetuated by being allowed to seed.*

"*Weeds are disseminated from road-sides, and waste land, or from a badly managed farm to a good one, chiefly by 'flying seeds.'*

"*Sowing of Seeds.*—That weeds are perpetuated notwithstanding the most careful preparation of the land, by sowing them with our seeds, is a fact too well known to be disputed. Six years ago we saw a field sown with foreign flax-seed, which came up full of black mustard,—*Sinapis nigra*, much to the injury of the crop: this has ever since been a troublesome weed in the field, and has even been the means of disseminating it over a great portion of a farm on which it was previously almost unknown. Again, many weeds are sown with clover seeds, sainfoin, and the like, which, though they may not make way during the covering of the ground with the crop, may yet appear in some future crop. From this it follows, that too much care cannot be taken to get clean seed, and it wants but little botanical skill to detect the presence of weeds in a sample. Pure or clean seed is even worth paying a greater price for, as the reverse may entail trouble and expense for years. Any mechanical processes, therefore, which can be made available for cleaning seed are well worthy of patronage. A seedsman who will be careful in the preparation and collection of seed deserves the best support. In order also to assist in this matter, farmers should be particular not to allow a dirty patch to stand for seed, although it may be 'the most profitable thing they could do with it.'

"*Weeds and Manure.*—It is too much the custom to consider that the power of germination of seeds is destroyed by decomposition in manure heaps. That some are so, when the manure has been thoroughly decomposed there can be no doubt; but many are not, and with those that are the process is too uncertain to be relied upon. We have seen quantities of pulled docks and of crow-garlic thrown upon a heap to decay, and afterwards noticed vetches manured therewith to be full of these troublesome weeds. Neglected manure-heaps are often covered with a profuse vegetation, which thereon produce enough weed-seeds to stock a farm. In these cases the plants rendering the original seed were, doubtless, mixed with the straw of which the manure was made, and yet, notwithstanding the vicissitudes they had to contend with, were not

"destroyed. Too much care, therefore, cannot be taken to prevent this source of mischief, to which end it will always be found best to burn pulled weeds; and in harvesting corn, docks, thistles, and the like, should not be bound up with the sheaves, but, if practicable, left standing, and afterwards destroyed.

"Weeding should be done as early as possible, either with the horse-hoe, common hoe, or sometimes the Dutch hoe, and, when thus early cut down, may safely be left to wither on the ground; but it should be borne in mind that if any individual plants amongst them are shedding their seed at the time, and are not taken away, the very hoeing insures its safe plantation.

"It is precisely in this way that coltsfoot is often much increased. The flowers of this plant appear in spring before the leaves. By the time the seed is ripe the leaves become conspicuous; the hoe is then set to work to cut down the latter, by which the ripened seeds are sown, when, if left, they might have flown away to a distance. Now, it may be that the roots of the coltsfoot—for it is not destroyed by the hoe—are forked out after the crop has been gathered; but the sown seeds will insure that the pest shall give us some more work to do at a future time. The patches of coltsfoot flowers should, therefore, be cut down as soon as they appear, and by this means we not only spoil the crop of seeds, but cripple the growth of the plant by cutting off the leaf-buds. Many other instances of a like kind might be adduced tending to show that a knowledge of the natural history of weeds is of great importance in enabling us to subdue them.

"*Dissemination of Weeds from Wastes.*—This is a matter that requires serious consideration, and, having once obtained correct views upon the subject, should incite to prompt and energetic action. It is well known that some of the most pernicious weeds are to be found amongst the *Compositæ*, a natural order of plants to which the *Sonchus*, *Leontodon*, *Carduus*, *Tussilago*, *Senecio*, and *Centaurea* belong. Now, in all these plants we may observe that their seeds are crowned with a feathery down—the *Pappus* of botanists—which acts as a tiny parachute, enabling such seeds to be wafted here and there by the slightest breeze, and thus they float for miles. It, therefore, follows that however particular we may be in trying to subdue them in our cultivated fields, yet waste places and waysides, where many species like to dwell, if not attended to will ever afford a nursery for many of the most objectionable weeds. Waste places, therefore, on every farm—if there be such—cannot too carefully be looked to in this matter; and, if the principle be fully recognised, the keeping roads in order, especially in rural districts, will comprehend *weeding the waysides*. We once saw a farmer employ men, in a not over busy time, in mowing thistles on a good breadth of road running through the middle of his farm, but, unfortunately, the seed was ripe when this was done, and, as the thistles were left where they fell, the dissemination of their seeds was not prevented. This, therefore, is a matter which seems to belong to the overseer of the road, and the plea of idle time should never be recognised.

"But, unfortunately, it is not always that these evils emanate from mere waste places and roadsides. One bad and dirty farmer may preserve weeds enough to continue a supply to a wide range of neighbours; in which case it would not seem unreasonable to call upon him to render compensation for damages.

"The weeds of hedge-banks and fences are innumerable: many wild

"flowers, not in our list, by growing in such situations, are weeds. Couch, cleavers, bindweed, and bryony are among the most troublesome, especially when they occur in young quicks. To insure the growth of the fence these must be removed, and, indeed, should never be suffered to make head. This can be done with a small fork, handled with judgment, so as not to disturb the roots of the hedge. By this means we may not only remove the weeds, but the operation contributes to the fertility of the soil, and thus the hedge more quickly overtops what, but for this attention, would completely smother it. In this case, as in most others, it is safer to burn what we remove than to remove it to the dunghesp or to let it lie about. We knew a farmer who offered his cottagers 3d. the bushel for weed ashes; and as a description of the manner in which a cottage family proceeded to make them may be useful and interesting, it is here given:—The refuse of the garden was first put together in a heap, and covered with turf from the roadside; this, on being fired, burnt in a smothered manner; the children brought all the weeds and refuse they could collect from time to time, and added it green to the rest, and, by the occasional addition of turfs, a continued smothered fire was kept up for weeks; in one cottage garden was as much as fifty bushels, and the process still going on. With these ashes the farmer always did well in his turnip crop, so that not only was an exterminating warfare carried on with our enemies, but they were destined ultimately to be converted into food; and we cannot better conclude this essay than by saying—Always destroy the life and reproductive power of weeds, even by fire, if necessary."

And on this subject, one of our most observant and popular authors, Mr. Charles Dickens, the able and distinguished Editor of 'Household Words,' in the number of that useful periodical for January last, after gracefully alluding to the exertions for the eradication of weeds, which were being made in Ireland, remarks:—

"Inasmuch, as Nature is resolved to spread her carpet where she can, and man knows very well that the green carpet with its pretty little flower patterns, must be taken up wherever the ground is to be tilled for special uses of his own, the need of constant watchfulness is obvious enough. To say that over a given space there shall grow nothing but wheat, if we mean earnestly what we are saying, is to declare war against all other growths which set up their own claims to the same land. It is a case of war arising out of territorial aggression. The farmers seize upon a territory occupied by various races of plants known to them by the rough general name of The Weeds. The weeds are got under, subdued, in a great measure extirpated, and the farmers then set up an iron rule over the soil, upon which they establish in rich colonies their own subjects, the cereals and green crops. The farmers justify their first aggression. The well-being of mankind depends, they say, on the predominance of the two races of cereals and green crops. What do the weeds care for this reasoning? The race of man has always trampled on them. They are the first owners of the soil. They claim it. They watch, therefore, the opportunity to rise, and every great rising of the weeds is attended with a frightful massacre of the new race. There is no mercy shown even to the newly born, whether of the green crops or the cereals. Thousands upon thousands of them are without pity smothered by the weeds, while others perish in their prime.

"Let us observe the common case of a fortified town in possession of

"a cereal colony, such as we may take a wheat field to be, walled with its hedges, moated with its ditches, and having its one or two great gates kept carefully closed. Not only is it frequently in England, and almost invariably in Ireland, plagued by the insubordination of the weeds allowed to live within its bounds, and to lie there at the root of general society; but it is, every summer, regularly besieged by ragged regiments. There are the chickweeds, the hawkbits, the thistles, with their white plumes waving and their lances shouldered, the poppies, reddest of republicans, the black mustards, whose family, perhaps, has caused more tears to be shed than any race, except that of the onions. There are the nettles with their poisoned barbs, the dandelions each with fire upon his head. These storm the field, master the outworks, and do not a little mischief to the regiments that lift their shining spears within. " "

"It would appear that we are within the truth in saying that, where the weeds are not kept under, there is a loss incurred of one-fourth of the crop. The weeds rob the growth with which they are mixed of some part of the food which the ground holds for the use of plants; they clog the ground mechanically; they keep air and light from the young seed; they injure the crop seriously when there is high wind or heavy rain; they delay the processes of harvesting and stacking; and, by so doing, increase the farmer's risk; while the grain that has ripened under all these disadvantages, goes to the stack worse corn than it would have been had it been grown unaccompanied by weeds.

"The suppression of weeds has been considered in France a duty not unworthy of being enforced by law. A French farmer may sue his neighbour who neglects to destroy the thistles upon his land at the proper seasons, or he may employ people to do it at his neighbour's cost. In Denmark, there is a law to oblige farmers to root up the corn-marigold. The oldest regulation against the corn-marigold was, probably, that in a Statute of Alexander the Second of Scotland; which, in or about the year 1220, denounced that man to be a traitor who poisons the King's lands with weeds and introduces into them a host of enemies. Bondsmen who had this plant in their corn were fined a sheep for each stalk, and a Scottish baron held what were called Goul Courts, for the purpose of fining farmers in whose growing crops three or more heads of corn-marigold could be detected.

"In modern times a clause of a Bill which enforced the extirpation of weeds in hedges and along roadsides, passed our English House of Commons, but was thrown out by the Lords. Yet it is possible that great advantage might result from one or two legal provisions of this kind. The loss by weeds in England is not very great; in Ireland the fields are overrun with them."

It is satisfactory to state that the Royal Agricultural Improvement Society, the Royal Flax Society, and the North-East Agricultural Association, and many local farming societies, have aided this movement for the destruction of weeds. Extracts from the Reports and Minutes of some of these bodies are given at pages 42 and 43.

At the late meeting of the Royal Agricultural Improvement Society, at Waterford, the following earnest and emphatic observations, which cannot fail to have a most beneficial effect, were addressed by His Excellency to a large and influential assemblage of landed proprietors and agriculturists:—

"I know that the total extinction of weeds must be a work of time,

"and of gradual and continued effort, like all other great works;—but
 "Delhi has not yet fallen—and Irish weeds are not yet extirpated; and
 "I believe the one to be as essential to the real regeneration of Irish
 "Agriculture, as the other is to the martial glory and stability of the
 "Empire."

COPIES OF LETTERS ADDRESSED TO VARIOUS PUBLIC
 FUNCTIONARIES BY THE REGISTRAR-GENERAL, WITH
 A VIEW TO THE DESTRUCTION OF WEEDS IN IRE-
 LAND.

No. 1.

Agricultural Statistics Office,
 5, Henrietta-street, Dublin,
 21st February, 1856.

MY LORD,

I beg to state that, in connexion with Agricultural Statistics, I have, with the sanction of the Government, for some years past, procured Returns from every Constabulary District in Ireland, which unfortunately exhibit a great prevalence of Weeds, not only on large tracts of land, *but also along the sides of Public Roads*, in almost every County.

I enclose a Copy of the Form on which this information has been furnished to me by the Enumerators; and the results are given in my Report on Agricultural Statistics for 1854, a copy of which I had the pleasure of presenting to your Lordship,—(*Vide pp. xxi, xxii, xxiii.*)

I annex the Copy of a Resolution setting forth the injury arising from the *growth of Weeds along the sides of Public Roads*, which was addressed in 1854 to the Grand Jury of each County, by the Royal Agricultural Improvement Society.

My reason for now bringing these circumstances under your notice is, respectfully to solicit that, on public grounds, and as tending to a great social improvement, *your Lordship may, perhaps, be pleased, at the approaching Assizes, to direct the attention of the Grand Juries, and County Surveyors, to an object which is calculated to be of much benefit to the Farming Classes of Ireland.*

Trusting that you will pardon the liberty which I take in addressing you on this subject,

I have the honour to be, your Lordship's faithful servant,

WILLIAM DONNELLY, *Registrar-General.*

To the Right Honorable

Judge ———,

&c., &c.

ENCLOSURE.

42, Upper Sackville-street, Dublin,
 21st February, 1854.

At a very full Meeting of the Managing Committee of the Royal Agricultural Improvement Society of Ireland, held this day—(upon the motion of Mr. Donnelly),

IT WAS UNANIMOUSLY RESOLVED—

"That, as great injury arises to the Farming Classes in this country

from the growth of Weeds along the sides of Public Roads, whose seeds being allowed to ripen and shed, are spread over the adjoining lands,

"A Circular be immediately addressed to the Grand Juries of the several counties, soliciting them to give directions to the County Surveyors to make it imperative upon Road Contractors to cut down and remove all Weeds, more particularly Thistles, Docks, and Rag Weeds, *before the 1st of June, and at such other periods in the year as may prevent their injurious effects to the Farmer.*"

HENRY HALL (Colonel, C.B.), *Chairman.*

No. 2.

Agricultural Statistics Office,
5, Henrietta-street, Dublin,
7th July, 1856.

MY LORD,

With reference to my letter of the 21st of February last, asking your Lordship to be so good as to direct the attention of Grand Juries and County Surveyors to the *pernicious growth of Weeds which is permitted along the sides of Public Roads, greatly to the injury of the Farming Classes of Ireland*, I now take the liberty of enclosing the Copy of a Circular addressed by me to all County Surveyors, in the hope that your Lordship may be pleased at the present Assizes to bring the subject before the several Grand Juries, with a view to the introduction of a Covenant into all Road Contracts requiring the destruction of Weeds along the sides of the Public Highways of the country.

Trusting that you will pardon this liberty,

I am, your Lordship's faithful servant,

(Signed) WILLIAM DONNELLY, *Registrar-General.*

The Right Honorable

Judge _____,
 etc., etc.

No. 3.

Agricultural Statistics Office,
5, Henrietta-street, Dublin,
5th July, 1856.

SIR,

As it is now universally admitted that great injury arises to the Farming Classes in Ireland, from the Growth of Weeds along the sides of Public Roads—Railways and Canals—and the shedding of their seeds over the adjoining lands, and as you are probably aware that the attention of many of the Grand Juries and County Surveyors was directed to the subject by the Judges of Assize at the last Spring Circuit, I take the liberty of addressing you, in the hope that, in your official capacity as Surveyor of the County of _____, you will obtain the authority of the Grand Jury at the present Assizes, in order that a special Covenant may be introduced into all Road Contracts, requiring the destruction of Weeds on the sides of the Highways, under your supervision. I beg here to inform you that the Lord Lieutenant considered the removal of Weeds *not only from Farms*, but also from the sides of all Public Roads, of so much general importance, that his Excellency was pleased to refer to the subject at a recent Agricultural Meeting of the Royal Dublin Society. Annexed is a table,

taken from my Report on Agricultural Statistics in 1854, which shows the great prevalence of Weeds on Road sides:—

"The degree in which Weeds prevailed on the sides of Roads, Railways, and Canals, is shown in *four* classes: in the first, the proportion *kept generally free* from Weeds is given; the second shows the proportion in which the removal of Weeds *was only partially* attended to; the third, the proportion in which this useful labour was *almost entirely omitted*; and the fourth class, that in which it was *wholly neglected*. According to the Returns received by me, the proportion under each of these classes is shown for 1853 and 1854, by Provinces:—

PROVINCES.	ROAD SIDES, &c.							
	First Class.		Second Class.		Third Class.		Fourth Class.	
	1853.	1854.	1853.	1854.	1853.	1854.	1853.	1854.
	Proportion per cent.	Proportion per cent.	Proportion per cent.	Proportion per cent.	Proportion per cent.	Proportion per cent.	Proportion per cent.	Proportion per cent.
Leinster, . . .	27	25	27	16	16	9	30	50
Munster, . . .	24	17	30	17	19	9	27	57
Ulster, . . .	23	18	30	25	20	17	21	40
Connaught, . . .	18	14	25	16	19	9	38	61
Ireland, . . .	24	18	28	19	19	11	29	52

The following is an extract from a Notice, addressed to Road Contractors by a County Surveyor of Ulster,—in which the destruction of Weeds is specially referred to in the Specification as *one of the conditions of the Contract*.

"Road Contractors will please take notice that no Certificates will be granted, unless their Roads have been kept in repair in accordance with the following Specification."

* * * * *

"The Roads, Footpaths, and Fences, must be kept free from Weeds."

* * * * *

On Public Grounds, and more especially on account of the benefit which will arise to the Farming Classes of Ireland,—who so largely contribute to the maintenance of Public Roads,—I trust you will excuse my addressing you on this subject.

I am, Sir, your obedient servant,

WILLIAM DONNELLY, Registrar-General.

To—

The County Surveyor
of—

OBSERVATION MADE ON THE FOREGOING SUBJECT BY THE MASTERS IN CHANCERY.

"We beg leave strongly to recommend this matter to the consideration of the Receiver Master, our brother, Master Lyle."

WILLIAM HENN. EDWARD LITTON.
WILLIAM BROOKE. J. J. MURPHY.

July 19, 1856.

[I subsequently received the approval of Master Lyle personally.]—
W. D.

No. 4.

Agricultural Statistics Office,
5, Henrietta-street, Dublin;
24th July, 1856.

GENTLEMEN,

May I take the liberty of requesting your attention to the accompanying Circular, addressed by me to the County Surveyors, relative to the destruction of Weeds along the sides of Public Roads in Ireland.

A copy of this Circular was forwarded by me to each Judge of Assize, Grand Jury, and Clerk of the Crown, for every County, previous to the late Circuit,—and it has, I am happy to state, been very favourably received,—the importance of the subject to the farming classes having been brought under the notice of the Grand Juries by their Lordships the Judges, in a very marked manner,—and I am informed that in future a special covenant will be introduced into Road Contracts, in those Counties in which the practice has not hitherto existed, requiring the Contractors to destroy all Weeds along the Sides and Fences of the Roads under their care.

I confidently trust that, on public grounds, you will excuse my addressing you on this subject, and that you will be so good as to give directions to have all Weeds *immediately* removed which may be found growing on the sides, embankments, cuttings, and fences of the Railway under your control, and thus aid in conferring a great benefit on the farming classes of the country, as it is scarcely necessary for me to observe, that the shedding of the seeds of Thistles, Dock, Ragweed, and other noxious plants,—which are now *fast approaching to maturity*,—*must cause great injury to the occupiers of land adjoining those Railways along which this most useful labour has been hitherto omitted.*

I am, Gentlemen, your faithful servant,

WILLIAM DONNELLY, *Registrar-General.*

To the Chairman and Directors
of the———Railway.

No. 5.

Agricultural Statistics Office,
5, Henrietta-street, Dublin,
10th July, 1856.

SIR,

Referring to my conversation with you on the 5th instant, I beg to enclose the copy of a letter addressed by me to the Judges of Assize, and also the copy of a Circular to the Surveyor of each County, pointing out the great importance of the destruction of Weeds along the sides of Highways,—I am happy to add that these have been most favourably received in every quarter.

As this, I think, may be considered a subject of National interest, it occurred to me, as I have already stated to you, that the Irish farmers would be greatly benefited if their children who attend the National Schools were impressed with the feeling that the growth of weeds is most injurious to a proper system of cultivation; and that the pupils of these schools should be requested by their Teachers to destroy all Weeds found growing on the farms of their parents.

As I understood you to concur with me in the importance of the subject, may I request you will be so good as to bring it under the notice of the Commissioners of National Education, at their meeting to-morrow, in order to obtain their approval to directions being given to the Inspectors of your Schools, to call the attention of the Teachers, not only of the Agricultural, but also of all other Schools in connexion with the Board of National Education, to the *great benefit certain to arise to the farming classes of Ireland, by instructing the pupils as to the necessity of destroying Weeds*. I need scarcely add, that the seeds of Thistles and all other noxious Weeds are now fast advancing to maturity.

I am, Sir, your obedient servant,
(Signed), WILLIAM DONNELLY, Registrar-General.

To the Right Honorable
Alex. MacDonnell, &c., &c.

REPLY.

Office of National Education,
21st August, 1856.

SIR,

We have had the honour of laying before the Commissioners of National Education your letters of the 10th July and 18th instant, relative to the great importance of the destruction of Weeds along the sides of Highways.

We are directed to state in reply, that the Commissioners cordially approve of the suggestion you have made, that *the children attending the National Schools should be instructed by their respective Teachers as to the necessity of destroying all Weeds found on the farms of their parents, or on the Highways adjacent thereto*.

The Commissioners will, therefore, have much satisfaction in pointing out to their Inspectors the steps necessary to be taken for carrying your suggestion into effect.

We are, Sir, your obedient servants,

MAURICE CROSS, }
JAMES KELLY, } Secretaries.

William Donnelly, Esq., Registrar-General,
Agricultural Statistics Office,
5, Henrietta-street, Dublin.

[The number of pupils attending National Schools exceeds half a million.]

No. 6.

Church Education Society for Ireland,
Kildare-street, Dublin,
28th August, 1856.

SIR,

In accordance with your request to the Rev. Alexander Leeper (Chaplain to the Society), relative to the importance of destroying weeds along the sides of highways, &c., your letter of the 22nd instant was laid before the Committee of the Church Education Society. I am directed, in reply, to state that *the Committee very cordially approve of your suggestion, that the children attending Church Education Schools should be instructed by their teachers as to the necessity of destroying all*

weeds found on the farms of their parents, or on the highways adjoining thereto. The Committee will make the matter known to all their students under training for the post of teacher, as also to their inspectors, to whom they will give the necessary instructions.

I am, Sir, your obedient servant,

JOHN BANKS, R.N., *Assistant-Secretary.*

Wm. Donnelly, Esq., Registrar-General,
Agricultural Statistics Office,
5, Henrietta-street, Dublin.

[The number of children attending Church Education Schools exceeds ninety thousand.]

No. 7.

Poor Law Commission Office, Dublin,
5th August, 1856.

SIR,

The Commissioners for administering the Laws for the relief of the Poor in Ireland acknowledge with thanks the receipt of your letter of the 31st ultimo, transmitting copies of two circulars issued by you, one addressed to County Surveyors, and the other to the Directors of Railways and Canals in Ireland, relative to the destruction of Weeds; and the Commissioners desire to inform you that they have directed that copies of your letter, and of the circulars which accompanied it, be transmitted to the Boards of Guardians of the several Unions in Ireland, and that their attention be called to your suggestion, that the children in the workhouse schools should be instructed as to the injury arising from, and the necessity for destroying, Weeds on the farms upon which, in after life, they may be employed.

By Order of the Commissioners,

B. BANKS, *Chief Clerk.*

William Donnelly, Esq.,
Agricultural Statistics Office,
5, Henrietta-street.

No. 8.

Office of Public Works, Dublin,
4th August, 1856.

SIR,

I am directed by the Commissioners of Public Works to acknowledge the receipt of your letter of the 31st ultimo, respecting the destruction of Weeds growing on embankments, or heaps of earth formed during the progress of works under the control of this department, and, in reply, to acquaint you that the Commissioners will be happy to co-operate in carrying out the very desirable object contemplated by you, and will issue instructions to their officers accordingly.

I am, Sir, your obedient servant,

E. HORNSBY, *Secretary.*

William Donnelly, Esq., Registrar-General,
Agricultural Statistics Office,
5, Henrietta-street.

No. 9.

Board-room of the Governors of the Schools
founded by Erasmus Smith, Esq.,
11, Kildare-street,
13th September, 1856.

SIR,

In reply to your letter, dated 5th instant, I beg to say that the Governors have ordered a circular to be addressed to their teachers, directing them to carry out your suggestion, that the pupils attending the Governors' Schools should be instructed as to the necessity for *destroying weeds on the farms of their parents and elsewhere.*

I have the honour to be, your obedient servant,

EUSTACE THORP, *Assistant-Registrar.*

Wm. Donnelly, Esq., Registrar-General,
Agricultural Statistics Office,
5, Henrietta-street.

In addition to the foregoing correspondence, the following extracts will show that great interest is now taken in the subject of the destruction of weeds in Ireland:—

Royal Society for the Promotion and Improvement of the Growth of Flax in Ireland.

Extract from the Report, dated 28th November, 1856:—

“Extirpation of Weeds.—Mr. Donnelly, the Registrar-General, has most wisely called public attention to the great loss occasioned by inattention to the weeding of growing crops, and to keeping the margins of roads, railways, and canals, free from weeds. Your Committee hope that his very valuable and practical suggestions will have the weight they merit. They have always, in their printed instructions, and through the teachings of the Society's agents, urged the necessity of weeding the flax crop, and have published Professor Dickie's paper on the parasitic plants which infest it. They now trust that Mr. Donnelly's highly important efforts will direct increased attention to the subject, as no crop suffers more than flax from inattention to weeding.”

Royal Agricultural Improvement Society of Ireland.

Copy of a Resolution unanimously adopted at the Half-yearly Meeting held on the 18th of December, 1856,

The Earl of Clancarty in the Chair.

Proposed by Lord Clonbrock, and seconded by Mr. Naper, of Loughcrew:—

“That the Society takes this opportunity of expressing its entire approval of the exertions of the Registrar-General in calling public attention to the importance of the destruction of Weeds on the tillage and pasture lands of this country, and the Society trusts that the Local Farming Societies will, as far as practicable, use every exertion—by

annexing suitable conditions as to clearing of lands from Weeds, in the distribution of their premiums—in order to accomplish this important object.”

North-East Agricultural Association of Ireland.

Extract from Annual Report, dated 16th of January, 1857:—

“In their Report, the judges of farms directed the attention of this Association to a subject which has been ably brought under public notice by William Donnelly, Esq., Registrar-General, in his last Report on the ‘Agricultural Statistics of Ireland’—the importance of destroying weeds. Your Committee would urge every member of this Society to use his utmost exertions, both *by example and precept*, to get rid of these pests of the farm, which are not only most unsightly, but a source of great loss to himself and serious injury to his neighbour.

“Your Committee would also suggest that an application be made to the Irish Government, to have a Bill for the Prevention of the Growth of Weeds brought into Parliament.”

The following Circular was addressed to the Magistracy, the Clergy of all Denominations, and other influential parties in Ireland, when sending them the Abstracts of Tillage and Live Stock:—

Agricultural Statistics Office,
5, Henrietta-street, Dublin,
October 20, 1856.

SIR,

In forwarding to you the accompanying abstracts and observations on the extent of Tillage and Number of Live Stock in Ireland, in 1855 and 1856—which I trust you will find interesting—I would earnestly solicit your attention to my remarks in reference to the extraordinary, and almost incredible growth of Weeds which is permitted along the sides of Public Roads, Railways, and Canals, as well as on many of the farms of Ireland. I say almost incredible, for it would be quite so, did not our every-day experience of their condition in this respect, convince us of the fact:—so important, indeed, has the subject become, that it has called forth the marked observations of His Excellency the Lord Lieutenant, at the late Cattle Show of the Royal Agricultural Society at Athlone, as well as on former occasions; also of Her Majesty’s learned Judges of Assize, and of the Grand Juries of almost every county in Ireland, during the late circuits. It may be truly said that a great social evil has imperceptibly grown up amongst us, until at length the attention of a large portion of the community has been turned towards it, with the view of finding a proper and permanent remedy: this happily, is within our reach; for, if the *landed proprietors, the resident gentry, and the clergy of all denominations, aided by the intelligent and improving Tenant Farmers of the country*—who are themselves the greatest sufferers from the present lamentable apathy and neglect—will only act upon the advice of His Excellency, and of Her Majesty’s learned Judges, I feel I am not too sanguine in expressing my conviction that, in a few years, a most propitious change will have taken place, and the surface of this beautiful

Island—now covered in so many places by large masses of thistles, and of yellow, scarlet, and other noxious weeds, which are permitted to grow and thrive, and scatter their baneful seeds far and wide—would then become what Providence designed her, and we now vainly boast her to be—the “Emerald Isle.”

The extracts which I have given in the accompanying Report from the writings of that true patriot, Sir John Sinclair, clearly prove *the great pecuniary loss arising from neglect in weeding cereal crops*. There is, however, another reason for weeding them, quite distinct from the important national question of *the loss in yield*,—which must attract the notice of every person who is not already familiar with it. I allude to the acute pain caused to the laborious reapers of our harvests, *when grasping the corn in the act of reaping*, by which, if the crop abounds with thistles and other prickly weeds, as is too frequently the case, the hands of the reapers are severely wounded. I have myself made inquiry from several parties of reapers from various counties, and from all of them I learned, that they would much sooner cut down and bind an acre of corn free from thistles and other weeds for *four or five shillings* less than they would a “dirty” crop—the reason invariably given being the additional time occupied in cutting down the latter, and the injury done to their hands by grasping the prickly weeds when reaping;—to use their own expressive words, “their hands were often so fostered and destroyed by thistles, that they had to give up their work.”

I would beg, therefore, to observe, that *Self Interest*,—by obtaining an increased yield (as clearly shown in the writings of Sir John Sinclair, from which I have quoted); *Economy*,—even on *small farms*—as the children of the farmers might, in the spring season of the year, when the weeds are tender, assist in cleaning the crops, and thus aid in economizing the additional four or five shillings an acre, which, as I have stated, are paid for reaping “dirty crops,” but not least of all, *Sympathy for the poor reaper and binder* of our harvests, will, I most respectfully venture to hope, insure the co-operation of all classes, and the continued aid of the public press, in the attempt now being made to draw attention to the importance of destroying weeds in Ireland.

My observations have been hitherto confined to the great loss and injury caused by neglect in weeding *cereal crops*; but it must be evident to every one that an equal, if not greater, amount of damage arises in many counties from the *shedding of the thousand seeds* of thistles and other noxious plants, which is but too generally permitted on the *grazing farms* of the country. I feel I am warranted in stating that the owners or occupiers of these grass lands are usually indifferent on the subject, and object to the expense of destroying weeds, asserting that they do *themselves* no injury. Although these parties may not be sensible of their loss, yet it cannot be denied that *THEIR NEIGHBOURS*, the unhappy tillage farmers, for miles around, suffer from the seeming neglect of the opulent grazier. Does not this state of things require a remedy? Why, I would beg to ask, should not Ireland rival England and Scotland in the care of her crops?—or why should she be behind that best of agricultural models—Belgium? Happily this is not a political or party question, but one in which all may cordially unite for the benefit of our common country; and therefore it is that I respectfully ask for your influence and friendly co-operation to aid in eradicating weeds from the farms of Ireland. To those who feel an interest in the progress of the country, it will, no doubt, be gratifying to learn from the correspondence given in the Appendix to the Abstracts of Tillage and Live Stock, sent herewith, that instruction as to the

importance of destroying Weeds will in future form part of the educational course in the National schools, as well as in those in connexion with the Church Education Society and other influential bodies; from which it is to be hoped much benefit may arise to the farming classes of the country.

I take this opportunity of stating how deeply sensible I am of the kind and valuable assistance afforded to me, during the last six years, by the magistracy and clergy of all denominations, and by the public press of Ireland, in reference to the collection of these statistics. It also affords me the greatest satisfaction to express my obligations to my intelligent fellow-countrymen, the Tenant Farmers of Ireland, for their generous confidence, and the readiness with which they have given to the Enumerators the required information respecting their Stock and Tillage—an honourable example, well worthy of imitation by the farming classes in England.

I trust the importance of the subject to which I have now taken the liberty of calling your attention, will plead my excuse for troubling you at such length.

I am, Sir, your faithful servant,

WILLIAM DONNELLY, *Registrar-General*.

To ———

The following extracts on the subject of the almost incredible growth of weeds which prevails in Ireland, are taken from the "Leisure Hour" for the months of May and June, 1873:—

IRISH AGRICULTURE

"Every traveller must be astonished at the neglect and waste of natural resources. Even in the pasture lands, in which Ireland most excels, the spontaneous liberality of the soil seems to induce the greater indolence and carelessness. The aid of art has been little used in laying down land to grass, for it is only recently that the trade in grass seeds has assumed any dimensions. Hay-making, as generally conducted, is a slovenly operation, though labour has been so abundant. Cut too late, I saw the grass often left in small cocks, to be drenched by the autumn rains. A good sweet hay-stack is the exception, not the rule, on an Irish farm. I never saw such a country for weeds. I saw two men in a field with scythes mowing down ragwort. Had I been travelling afoot or in a car, and not in a railway carriage, I would have sought an explanation of so strange a sight. Had the ragwort been sown as a crop, it could hardly have been closer, so as actually to be mown with scythes. Is it used as fodder for any Irish animal? I suspect it was only an extreme illustration of the miserable state of the agriculture too common in Ireland. The amount of weeds is a national disgrace. It is not uncommon to see a ton of weeds in a dozen tons of hay. Many a field has more weeds than a whole parish in England. Small tenants keep land without laying it down with grass seeds, and it becomes the receptacle for all the floating weeds of the district, and then spreads them far and wide. Even for green crops the land is seldom sufficiently

cleaned. Smoking heaps of twitch and weeds are rarely seen. If the farmer would give a small reward to boys for heaps of weeds, as they used to do for heads of vermin, they could keep this nuisance under. Ragwort, for instance, can easily be pulled up by the roots in wet weather, and the boys from the workhouse school would gladly attack a field for a trifling reward, and enjoy the fun of the bonfire that the heaps would make. But fields and road-sides are alike neglected, and weeds help to keep Ireland green but poor. *I am sure it is no exaggeration to say that the direct loss to Ireland from weeds is above a million and a half sterling. I have heard the loss estimated at nearly double that amount.* On the drainage of land vast sums have been expended, and under good management with wonderful results. But even in land that has been drained there is too general carelessness in scouring ditches and keeping the outlets of drains clear. It is better to have no drains than drains choked. In this matter, as in the curse of weeds, the careless, indolent habits of the people make agricultural progress up-hill work. Bad fences are also everywhere evident. The direct losses from the destruction of produce through this cause are enormous, and it is a constant source of litigation and ill-will. Want of industry and want of sense account for all the backwardness of Irish husbandry."—*Ireland in 1872: a Tour of Observation. By Dr. Macaulay, Editor of the "Leisure Hour."* (H. S. King & Co.)

IRISH WEEDS.

The Vicar of Holywood, near Belfast, writes to the Editor of the "Leisure Hour:"—

"I am interested in your remarks about weeds in Irish farming (quoted on p. 352 from 'Ireland in 1872.') You may be amused by the enclosed list of weeds found by me in one drill of turnips in a field five miles from Belfast, October, 1872.

"I think a handbill, pointing out the necessity of eradicating weeds and the time to do it, might be circulated, through clergy, magistrates, police, post office, &c., in Ireland, with good effect.

(Signed)

G. ROBERT WYNNE,

Vicar of Holywood.

"Weeds found in one drill of unweeded turnips, five miles from Belfast, October, 1872 :—

- Stellaria Media (chickweed).
- Cerastium triviale (varieties).
- Potentilla reptans (cinquefoil).
- Potentilla anserina (silver weed).
- Euphorbia helioscopia (spurge).
- Galeopsis Tetrahit (hemp nettle).
- Anthemis arvensis (com. chamomile).
- Epilobium parviflorum (willow herb).
- Polygonum aviculare (knot grass).
- Polygonum persicaria (persicaria).
- Mentha arvensis (mint).

Gnaphalium uliginosum (cudweed).
Linum usitatissimum (flax).
Ervum hirsutum (tare).
Tussilago farfara (colt's foot).
Ranunculus repens (crow's foot).
Achillea ptarmica (sneezewort).
Holcus lanatus (meadow soft grass).
Triticum repens (couch grass).
Bellis perennis (daisy).
Chrysanthemum segetum (corn marigold).
Lolium perenne (perennial ryegrass).
Senecio vulgaris (groundsel).
Prunella vulgaris (self-heal).
Sonchus arvensis (sow thistle).
Capsella bursa pastoris (shepherd's purse).
Atriplex patula (orache).
Carduus—several. (thistle).
Brassica sinapium (charlock).
Githago segetum (corn cockle).
Leontodon Taraxacum (dandelion).
Stachys palustris (?) (woundwort).

“All the above were in abundance, and the rest of the field seemed equally prolific.

(Initialed)

G. R. W.”

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